User's Manual























MPEG4(H.264) HDTV Digital Satellite Receiver

8000 HD



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Please read the entire manual thoroughly and retain it for future reference.

Important safety instructions

Safety Warnings



CAUTION: To reduce the risk of electrical shock, do not remove the cover. No user serviceable parts inside. Refer any servicing to qualified Service personnel.



This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

Read this manual carefully before using the product. The cautions described below contain important information about safety, and are categorized into: Danger, Warning and Notice.

The company will not take any responsibility for accidents or damage resulting from careless handling by the user.



Danger

If the user mishandles the product, there is a risk of loss of life or critical injury.

- Connect the power cord only to A/C outlets as specified by the user manual or product specification.
 If the power code is connected to a non-specified A/C outlet, it could result in fire or electric shock.
- The product must not be exposed to water or liquid of any sort, or be exposed to drips or splashes. It could result in fire or electric shock.
- Do not place heavy objects, including the product itself, on top of the power cord. If it is damaged, it could result in fire or electric shock.
- Do not place metal objects on top of the apparatus. If metal objects fall into the apparatus, it could result in fire or
- Do not repair, disassemble or modify this apparatus yourself. It might cause fire or electric shock. If internal checking or maintenance is needed, please contact your service center or agency.
- Do not block or cover any ventilation opening. A fire might result from overheating.
- Turn off and unplug the power as quickly as possible during electric storms. Failure to do so could result in fire or electric shock.
- Remove the antenna's power plug from the outlet as quickly as possible during electric storms.
 Failure to do so could result in fire or electric shock.
- Do not drop the apparatus (for example by putting it in a place where it may fall) or subject it to impact.
 The product might be damaged. If it is damaged, please turn off the power and remove the plug from the power outlet, or fire or electric shock may result.
- Never touch the power cord with wet hands. It could result in an electric shock.







Warning

If the product is mishandled, the user might receive a serious or minor injury. Damage or loss to the user's property might also result.

- The product must not be exposed to water or liquid. If the apparatus is exposed to drips or splashes, it might cause
 a problem that cannot be repaired.
- Do not repair, disassemble or modify this apparatus yourself. It might be seriously damaged, possibly beyond repair.
- Turn off the power and unplug the power cord as quickly as possible during electric storms.
 They might damage the apparatus.
- Remove the antenna's power plug from the outlet as quickly as possible during electric storms, or the apparatus might be damaged.
- Data recorded in the HDD might be lost due to a shock, lightening or electricity failure.
 The user must back up his or her own data, and the company does not take any responsibility for failure to do so.



Notice

If the product is mishandled, it might cause minor damage.

- If the apparatus becomes marked, clean it gently with a soft cloth or towel. Never use chemical solvents such as benzene, thinner, acetone or other solvents. The surface of the apparatus might become discolored and the paint might peel.
- Do not place or keep the apparatus in the following situations. Doing so might cause problems.
 - Where it is too hot or cold.
 - Where there is high humidity.
 - Where there are excessive temperatures, for example in front of airconditioners or heating vents.
- Where there is dust or soot.
- In confined areas where the heat cannot be released.
- Where it is exposed to direct sunlight.
- Turn the apparatus off or unplug the power cord if it is to remain unused for a long period of time.
- Do not place heavy objects on top of this apparatus. It might cause malfunction or damage.
- If the apparatus is so seriously damaged that it cannot be repaired, or has stopped working altogether, dispose of it properly in accordance with the local laws or regulations in your area.

Disposal

Batteries and packaging material do not belong in domestic waste. The batteries must be delivered to a collection center for old batteries. The separate disposal of packaging materials protects the environment.

Disposal old electrical & electronic equipment

(Applicable in the European Union and other European countries with separate collection systems)



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.





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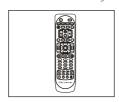
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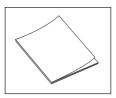
1. Getting Start

1.1 Package Contents

Make sure that the following accessories are supplied with your receiver.







Remote Control Unit

AAA Batteries (2 EA)

User's manual



		Normal Mode	Change to the next channel.
	^	Menu Mode	Move to the upper item.
		Normal Mode	Change to the previous channel.
0	Y	Menu Mode	Move to the lower item.
U		Normal Mode	Volume up.
		Change item	Change item.
		Normal Mode	Volume down.
		Change item	Change item.
		Normal Mode	Display the Main Menu.
2	Menu	Menu Mode	Go to the sub menu.
6	Displa	ay window	Displays the current state such as channel, time, and massage.
4	P	OWER	Turn on & off the power.
6		Exit	Return from menu.
0	Smai	rtcard Slot	Insert a Smartcard.



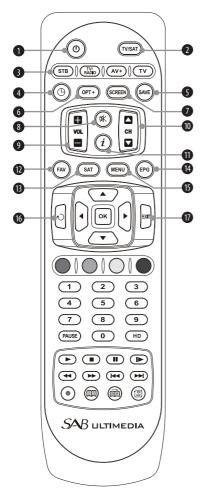
0	LNB IN	Connect satellite antenna.
2	LNB OUT	Connect to the other satellite receivers.
3	ANT IN	Connect TV antenna or CATV cable.
4	LOOP OUT	Connect TV.
6	VCR SCART	Connect VCR.
6	TV SCART	Connect TV.
•	A/V(OUT)	Connect TV (Left/Right)
8	YUV(OUT)	Connect TV through Y/Pb/Pr.
9	НДМІ	Connect TV through HDMI.
10	S/PDIF	Connect TV Digital Amplifier (Optical).
0	Wireless	Internal Wireless Module(Option).
12	eSATA	Support SATA hard disk for PVR.
B	ETHERNET	Connect TV LAN cable.
14	USB	Connect USB memory.
15	RS-232C	Connect PC for software upgrade.
16	WLAN	Wireless LAN(Option).
•	POWER Supply	100-240V~, 50/60Hz, MAX 35W.
18	POWER SWITCH	Switch Power ON/OFF.







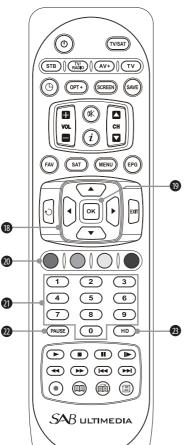
1.4 Remote Control Unit



0	Power	Power On/Off.							
2	TV/SAT	Switch TV or SAT	mode.						
	STB	Select STB.							
	TV/RADIO	Switch TV/Radio	mode.						
3	AV+	Digital Audio, Tele	etext, Subtitle menu.						
	TV Select TV.								
4	O	Sleep timer.							
6	SAVE	Save current volu	me & channel.						
6	OPT+	Show additional	function menu.						
0	SCREEN	Set screen format	i.						
8	₩	Mute the sound.							
9	VOL	Adjust the volum	e.						
		Normal mode	Change channel.						
0	СН	Menu mode	Move menu item.						
0	i	Show the current	channel information.						
0	FAV	Show Favorite Ch	annel List.						
B	SAT	Selects satellite.							
1	EPG	Show the Electro	nic Program Guide.						
		Normal mode	Show the main menu.						
13	MENU	Menu mode	Return to the previous menu.						
16	0	Go back to previo	us channel.						
0	EXIT	Return to the pre	vious menu.						



1.4 Remote Control Unit

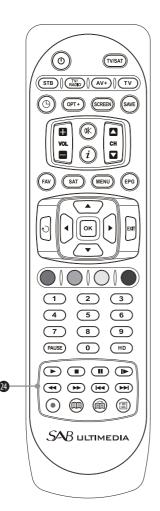


		Normal mode	Adjust the volume.
18	VOL ∢ ▶	Menu mode	Change the left/right item
	CH▲▼	Normal mode	Change channel.
	CH Z V	Menu mode	Move menu item.
•	OV	Normal mode	Show the channel list.
•	19 OK	Menu mode	Execute the select item.
20	Color Key	Normal mode	Additional Menu Red - Fine tune menu. Yellow - Configure Diseqc1.2 / Positioner. Green - Additional Menu.
		Menu mode	Selected function according to the Menu.
_	Numeric	Normal mode	Select channel.
a	buttons	Menu mode	Directnumeric key entry.
2	PAUSE	Pause screen.	
23	HD	Sort HD channel	only.





1.4 Remote Control Unit



	·	PLAY Change to normal speed in trick mode. Show play navigation bar in normal speed.
		Stop file playback and watch live channel in time-shift or playback. Stop recording.
	TII)	• Pause or resume play.
	I	• Change to slow speed forward play. • Speed: ½x, ¼x, ½x.
	₩	• Change to fast speed reverse play. • Speed: -x2, -x4,-x8, -x16, -x32, -x64.
24	>>	• Change to fast speed forward play. • Speed: x2, x4, x8, x16, x32, x64.
	H	Go to start position.
	(M4)	Go to end position.
	•	• Record current channel.
		• Set Bookmark in time-shift or playback.
		BOOKMARK JUMP • Jump to bookmark.
	(BROWSER • Show File List.





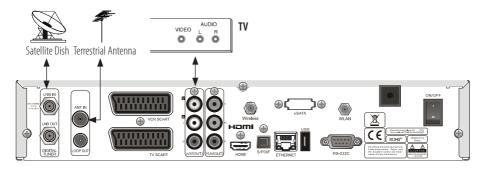
1.5 Connecting Your Equipment

Connect related equipments to STB as below.

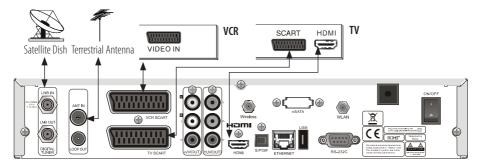
Note

When you connect STB to TV by using SCART, please fit the CLAMP FILTER near SCART jack.

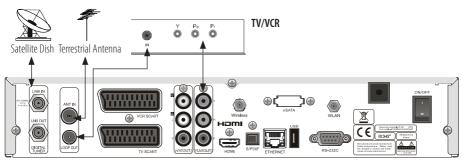
1.5.1 Connect TV with RCA cable



1.5.2 Connect TV/VCR with SCART / HDMI cable



1.5.3 Connect TV/VCR with YUV/Terrestrial cable install







2. Installation

2.1 Antenna setup



 Satellite: Select any satellite by pressing **♦** keys.

(Press blue key to edit the name of the satellite)

 Transponder: Select a transponder.

· LNB Type: Dual / Universal, Single, OCS, Wideband, Digiturk

MDU1, Digiturk MDU2.

 LNB Frequency: Select a proper LNB frequency.

(Press blue key to input local frequency)

UNICABLE: Select a unicable channel.

 DiSEqC 1.0 & 1.1: Select between "None" or "DiSEgC1.0 A, B, C, D" and "

DiSEqC1.1 1 ~ 16".

 Polarity Control: Select one out of "14/18V", "0/12V", "0/22KHz".

 0/12V Switch : Select between "OV", and "12V". • 0/22KHz Switch: Select between "OKHz", "22KHz", "Auto".

Note

Motor Type :

Make sure to save searched channels before exit.

Press **YELLOW** button to initialize satellite value.

After Antenna setup, you can move to Auto search menu with **RED** button.

You can Select "None", "DiSEqC1.2", or "USALS" by pressing ◀▶ keys.

2.2 Motor Setup



(Press blue key to edit the name of the satellite) Satellite: Select a Satellite.

 Transponder: Select a transponder.

2.2.1 Setting up DiSEqC1.2

In the Motor Setup Menu, select the DiSEqC1.2 then the following menu will be displayed.

 Satellite Select a satellite by pressing **♦** keys.

(Press blue key to edit the name of the satellite.)

Select a motor type by pressing **♦** keys.

 Transponder: Displaying current TP value. Nudge Size: Motor move step (1-5).

 Move Coarse : Move west (◀ key), Move east(▶ key). Move Fine : Move by the value of Nudge size.

 Motor Contro I: GOTO, SAVE, GOTOREF.

 Limit Setup : Setting limit.

Confirming the setting of East Limit. - FAST LIMIT : - WEST I IMIT · Confirming the setting of West Limit. Delete the setting of East & West Limits. - DELETE LIMIT :

Setting DiseqC 1.2

- 1. Select DiseqC 1.2 in the Motor setup menu.
- 2. Select satellite.
- 3. Move motor until you see good signal.
- 4. After searching satellite, SAVE current position.
- 5. Repeat this operation for other satellites.
- 6. Go to Auto search menu with RED key.

Setting USALS

- 1. Select USALS in the Motor setup menu
- 2. Enter longitude and latitude value
- 3. Save current setting in move control
- 4. Move motor to current satellite position and check signal.
- 5. Go to Auto search menu with RED key





2.2.2 Setting up USALS

Select the USALS in the Motor Setup menu, and press OK key to display following menu.

 Satellite: Select a satellite by pressing **◆** keys. Transponder: Displaying current TP value. • Satellite Position: You can edit the position of satellite. Longitude: Setting the longitude position. Setting the latitude position. · Latitude:

 Move Coarse : Move DiSEqC1.2 motor manually. Move west (▶), Move east (◄).

 Move Fine: Moves depending on the value of Nudge size.

 Motor Contro I: GOTO, SAVE, GOTOREF. · Limit Setup: Setting limit.

- EAST LIMIT : Confirming the setting of East Limit. Confirming the setting of West Limit. - WEST LIMIT : - DELETE LIMIT : Delete the setting of East & West Limits.

2.3 Auto Search



All channels will be searched if the selected satellite is properly assigned in the Antenna Setup menu.

Search Type

- Multi Satellite : Search multiple satellites as you select in pop-up

window.

- One Satellite: Search only the current satellite.

- Multi Transponder: Search multiple TS in transponder pop-up window.

- One Transponder: Search current transponder. Satellite: Select one of Satellite.

(Select satellite in the auto search menu and press

RED key to Multi Satellite Register)

Select one of transponders in TP list. Transponder: NIT Search: Activate network search mode.

· Channel search Type:

Select one of search Type between "ALL", "FTA", "Scramble", "All TV", "FTA TV", "RADIO", "Scramble TV", "All RADIO", "FTA RADIO", "Scramble RADIO".





2.4 Advanced Search



When a new satellite is launched or you want to search channels from a satellite which is not programmed, you can edit all of the transponders of the satellite by this function and then channels can be searched by "Advance Search".

• Edit TP: When you press GREEN key, EDIT TP menu It will

be displayed, The settings of "Frequency",
"Symbol Rate", "Polarization", and the other of
selected transponder will be displayed in each field.

• **Edit PID**: When you press RED key, Select any out of ¡DECj,¡HEXj.

• **Find Tuning**: When you press YELLOW key, You can control ¡AGC

Valuej, ¡Bandwidth¡.

• **Signal View** : You can show the signal status.

2.5 Blind Search



When a new satellite is selected or you want to search all Transponder from a satellite which is known or unknown transponder.

2.6 Fast Scan



You want to search channels from Canal Diditaal Fast Scan, TV Viaanderen Fast Scan and Telesat Fast Scan.





2.7 Terrestrial



You can edit all of the Frequency of the Terrestrial by this function. And then channels can be searched by Terrestrial.

3. Channel / Event

3.1 Channel Control

Channel Control consists of TV channel control and Radio channel control.

All kinds of channel editing functions can be performed in this menu like Channel view, Edit Name, Set/Clear favorite, Lock/Unlock, Edit PID, Move and Delete.

By default, there;s no channel list for both TV and Radio. Be sure to perform search channels before use.



3.1.1 Channel Mode

In order to control various channel lists, Channel Mode function keys assist users to organize many channels within their scope of action.

There are various keys to help you to perform channel control functions in help line.

3.1.2 Edit Mode

Press OK key then select channel Edit mode.





•

3.1 Channel Control



3.1.3 Edit Name

Edit the name of the selected Channel.
Select one channel and press OK key and then you can edit name.



3.1.4 Favorite Channels

Select Set/Clear FAV in the channel control popup menu, then another popup menu will appear on the right side of the screen (e.g. News, movie, drama). Select one of them and press OK to add to your favorite list. Then favorite icon will appear beside the channel name To deselect, go to the selected channel and press OK.



3.1.5 Lock/Unlock Channels

Select Lock/Unlock in the channel control menu. Press OK on the channel that you want to change. Then lock icon will appear beside the channel name. It will confirm that the channel is locked.

To unlock the channel, use \checkmark key on the remote, and press OK on the channel.



3.1.6 Hide Channel

Select Hide Channel in the edit channel popup menu.

Press OK on the channel that you want to set and clear hide channel.

To Show/disappear the Hide channel, you have to enter private password by pressing REC key.





3.1 Channel Control



3.1.7 Edit PID

Edit Video PID, Audio PID, PCR PID with Hex or decimal code. If you want to change PID number, press RED key to Enter value by yourself.



3.1.8 Move

Change the position of the selected channel in the channel list. Select MOVE in the edit channel popup menu, Press OK on the channel that you want to move, use press UP/DOWN key to locate channel position and RED (move channel) key and then Press EXIT key to save.



3.1.9 Delete

Delete the selected channel or TP.

Select delete in the edit channel popup menu, press OK on the channel that you want to delete, and RED(delete channel) key or Yellow (delete all)

3.2 Event Timer

Set the STB work in reservation mode to Wake up and Sleep using Timer.



Add the event in the list by the Green key, and edit the selected event in the list by the Red key.

To delete the event, press the Yellow key.

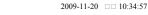
Ch View: Set the watching channel for turn ON/OFF time, cycle, etc.

Wakeup: STB will be automatically powered on by setting of Wakeup time.

Sleep: STB will be automatically powered off by setting of Sleep time.

Record · Record the reserved channel





4. Menu Guide

4.1 Channel List



Press OK key while watching video, then Channel List menu will be shown depends on channel mode (Sort mode). If the channel mode (Sort mode) is favorite mode, then Favorite channel list will be displayed. You can search the channel by sort function.

4.1.1 Satellite sort

If you want to change satellite select mode, press SAT key, and then Small pop-up window will be displayed, select one among them by pressing OK, and then select channel by pressing OK. Then the satellite select will be changed.

4.1.2 Alphabet SortIf you want to change alpha

If you want to change alphabetical mode, press Green key, and then Small pop-up window will be displayed, select among them by pressing LEFT/RIGHT/UP/DOWN, and then select alphabet by pressing OK. Then the alphabetical mode channel list will be changed.

4.1.3 HD Sort

If you want to change into HD sort mode, press HD key.

4.1.4 Favorite Sort

If you want to change Favorite Sorting mode, press FAV key, and then Small pop-up window will be displayed, select among them by pressing UP/DOWN, and then select Fav. list by pressing OK. Then the Favorite channel list will be changed.

4.1.5 TP Sort

If you want to change TP (Transponder) Sorting mode, press Yellow key, and then Small pop-up window will be displayed, select among them by pressing UP/DOWN, and then select TP list by pressing OK.
Then the TP channel list will be changed.

4.1.6 CAS sort

If you want to change into CAS Sorting mode, press Blue key, and then Small pop-up window will be displayed, select one among them by press UP/DOWN, and then select another CAS list by press OK.

Then the CAS channel list will be changed.







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4.2 Channel Guide



4.2.1 Channel Guide

Press EPG key while watching channel, then TV GUIDE menu will be shown.

The EPG menu consists of Channel number, Event name and the flag of extended event description.

Brief TV guide information of current channel will be displayed on the bottom of the screen.

By pressing RED key, select FULL TV Guide.



By pressing GREEN Key, 7-Days Guide will be displayed. And it is possible to move Now to guide and Next guide by pressing LEFT/RIGHT key.

Information consists of Event Name, Event Description and Extended Event Description



By pressing YELLOW button, you can easily set reservation schedule.

4.3 Normal Mode



For more detailed channel information, some channels are supporting Teletext/ Subtitle service.

There are two types of EBU Teletext service as followings:

This satellite receiver supports the both types.

- VBI: Supported by TV and controlled by Teletext key on TV remote controller.
- STB: Supported by satellite receiver and controlled by receiver's remote controller.





4.3 Normal Mode

Press AV+ key in the normal mode.

Choosing a Teletext service, then it will display to Teletext from current channel



< Teletext Mode >





4.3.1 Audio Control

< Subtitle >

Press AV+ key, then you can see Audio pop-up window and you can select audio language and audio mode (Left, Right, Stereo).

orirons



4.3.2 Fine Tuning

When the signal is very poor, you can change the user value in fine tuning menu, for better reception.

Press RED key in the normal mode, then select Fine Tuning.



4.3.3 Auto Channel Change

Press UP/DOWN key for $2 \sim 3$ seconds, then you can see auto Channel message on the channel information and you can change the time of auto channel change.





4.4.1 OSD Setup

In Normal Mode, Press MENU key, then select System Setup Menu and select OSD menu.



4.4.1.1 Language

You can set language which will be used for displaying menu. You can select English, French, Russian, Arabic, Persian, Turkish, Italian, and German.

4.4.1.2 Audio Language

You can set the default audio language.

4.4.1.3 Subtitle Language

You can set the default subtitle language.

4.4.1.4 Banner Time

You can set the displaying duration of Banner menu.

• Time Range: From 1 to 30 seconds.

4.4.1.5 Transparency

You can set the transparency of menu screen. 9 levels of the transparency are supported. Ranges from 0% to 80%.

4.4.1.6 Main Image

You can set the type of main still image for background.

4.4.1.7 Logo Image

You can set the Logo Image display ON/OFF.

4.4.2 Video

Press MENU key in Normal Mode, then select System Setup, and select Video submenu.



4.4.2.1 Screen Ratio

You can select the aspect ratio of TV screen according to your TV type. 4:3 and 16:9 modes are supported.

4.4.2.2 Screen Format

If the Screen Ratio is 4:3, there will be choices as Letter Box, Center, combined, and Full.

If the screen Ratio is 16:9, you will have choice as letter Box and Center and Full.





4.4.2.3 Display Format

You can select Display Format according to your TV type. "PAL", "NTSC", "SECAM", and "PAL & NTSC" modes are supported.

4.4.2.4 Display Size

1080i, 720p, 576p, 480p.

4.4.2.5 Deinterlacer

You can turn on/off the Deinterlacer.

If you set the deinterlacer value to ON, HDMI/YUV picture quality of SD channels will be improve. but, channel change speed will be slower.

4.4.2.6 YUV Output

You can turn on/off TV Component output.

If you want to set the video mode for TV SCART(RGB), then turn off the YUV Output and change SCART Output to RGB.

4.4.2.7 SCART Output

You can set the video mode for the TV SCART output, by pressing OK key, then press 🔦 🔻 key on the remote control unit. 2 Video Output as RGV/CVBS are supported.

4.4.3 Option

Press MENU key in Normal Mode, then select System Setup menu, and select Option.



4.4.3.1 Channel Change

You can select the way of changing the channel by pressing OK key, then press

▲ **▼**key on the RCU.

Supported mode: Blank, Fade

4.4.3.2 LNB Power

You can set the LNB Power ON/OFF by pressing OK key, then press $extbf{ iny}$ key on the RCU.

4.4.3.3 LNB Voltage

You can set LNB voltage by pressing OK key, then press ▲ ▼key on the remote control unit.

Supported voltage: 13/18V, 14/19V.

4.4.3.4 Recall List

If you set it "ON", you will be able to see the "Recall List" when you press RCL button.

If you set it "OFF", you can go back to the previous channel only.

Note

Recall list is the menu in which you can see the channels you watched past.





4.4.3.5 Volume Control

You can set the Volume Control by pressing OK key, then press ▲ ▼ key on the RCU.

Supported mode: All Channel – the volume value of all channel same value channel – every channel can have different volume value.

4.4.3.6 S/PDIF

You can set the S/PDIF output mode, Encoded and PCM.

4.4.3.7 Front Button

You can set ON/OFF

- ON: Front Key is working
- **OFF**: Front Key is not working

4.4.3.8 Auto CH View

You can set the channel change mode in Channel List and EPG Menu.

If you set the EPG or CH List, you can change channel by moving item in each menu.

4.4.3.9 FastScan CH Number

You can set the logical channel number mode. It is supported by the Program Provider.

4.4.3.10 Booster

You can turn on the Booster(electric power of Antenna).



4.4.4 Time

Mode, then select System Setup menu, and select Time menu.

· Time Offset

Press **♦** key to set the Current Time.

For your reference, when you scroll time zone, the name of city will be displayed.



4.4.5 Color Control

If you want fine tuning for color value, press MENU key in Normal Mode, then select System Setup menu, and select Color Control menu.

4.4.5.1 Color Mode

You can set the Color Mode.

Supported mode: User, Movie, News, Sports.









4.4.6 Parental Control

You can prevent children from watching channels, which are unsuitable for them. Only the person who knows the password can watch the prohibited channels. In the parental control menu, you can select four password options.

4.4.6.1 Lock Grade

Change the password options by ◀▶, None, Menu, channel, Menu & Channel. Password is made up of 4 digit numbers; it is never shown on the screen. Only asterisks appears as you input password, when you select the locked channel in "Favorite TV/Radio" or "TV/Radio channel Control", you will find the following message "Key in Password" on screen.

Then please insert your password.

4.5 Additional Function



4.5.1 Channel Information

· Basic Box

This is the information box containing "Program Number", "Program Name", "Signal Quality bar", "Current Time", and "Provider name" only.

Extended Box

This has additional information like and Satellite, channel Frequency and CAS Type as well as basic Channel Information.







4.6 Module

4.6.1 CI Slots

The CI (Common Interface) is an interface for a standard PCMCIA module in receiver. If you want to watch a scrambled channel, you need CAM (Conditional Access Module) and Smart Card to the channel.

CI menu is provided by CAM and its Smart Card.

This menu will be activated if you insert the CAM In the slot CI menu varies according to the kind of CAM and its Smart Card.



4.6.2 Network Setup

Pathway

You can select the network device to use.

- eth0: Wired network device

pci_eth0: Mini PCI type wireless network deviceusb_eth0: USB type wireless network device

If you want to use wireless network, you must attach the wireless network device in the STB.



Method

- STATIC: Static IP address can be used by entering the reserved IP

address

- DHCP: If DHCP (Dynamic Host Configuration Protocol) is selected,

IP address and all the basic TCP/IP protocols set automatically.



• AP List

If you use the wireless network device, AP(Access Point) List menu will be activated.

You can select the AP(Access Point).



Password

Input the password of the selected AP(Access Point).

· Ping Test

Verify the status of network connection to the server.



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4.6 Module

4.6.3 Software Upgrade

For Software upgrade, enter the server IP address which is defined by the Service Operator.

4.6.4 Embedded

This menu is for Free To Air + Embedded, and This menu allows you to view the information of the smart card such as available entitlements, Maturity Rating and PIN code.

4.7 STB Status



4.7.1 Factory Value

This function will reset all the parameters as factory default value. When this menu is selected, the message will be displayed on the screen.

You can change each field into default data in Factory Value.



4.7.2 STB Information

STB Information shows STB software version, data, etc for your reference. At the top of the page you will see the software version of the STB.





5. eSATA PVR Guide

5.1 PVR Setup



You can change the PVR configuration in PVR Setup menu.

To enter this menu, press MENU key in normal mode, and go to Channel / PVR menu, then select PVR Setup.

- Time Shift: Configuration for recording the current channel automatically
 If you set Time Shift to Enable(1 or 2 Hour), you can use time shift without
 recording a channel explicitly.
- Default PVR Path: Configuration for selecting the default recording device. If you attached the storage –SATA, USB-device, then you can select the default recording device.
- Record Duration: Configuration for default user record duration.
 If you select 2 Hour, then you can record a 2-Hour of channel when you record.

5.2 Media Setup



You can see the information of hard disk and format a hard disk in Media Setup menu. To enter this menu, press MENU key in normal mode, and go to Channel / PVR menu, then select Media Setup.

You can use an external SATA storage, external USB storage and USB memory stick. And it supports FAT16, FAT32, EXT2 and EXT3 file systems.

You can select the storage-SATA, USB- device in Media and select its partition. If your storage is not formatted or formatted with an unsupported file system, at first you have to format it. All data in the storage are removed when you format, so please backup your data before format. You can format hard disk by pressing OK key on Format item.

There are two ways of formatting hard disk - Media, Partition.

Media type is to format whole partition in hard disk and Partition type is to format the partition that you select in Partition item.

You can delete all files in partition that you select with RED key.
You want to extract the hard disk, please do safe remove by pressing GREEN key.







5.3 File Browser



You can see the files that you recorded and other media files(ex JPEG) in File Browser. To enter this menu, press BROWSER() key in normal mode. You can see the file information (size, date, duration etc) here. You can play a media file by pressing OK key on a file that you want to play. If you select a recorded channel, then you can select how to play.



First: Playback from first position

Continues: Playback from last stop position

- **Descramble**: Playback from last stop position

Press EXIT key in File Browser, then you can watch a file playback in full screen. If the file is reached to end time, then file playback will be stopped and be changed to live channel

If you want to play other media file(Photo or Music), then please change the Media file type by pressing the color keys as follows.

- Red: Video (Video Files List) - **Green**: MP3 (MP3 Files List) - Yellow: JPEG (JPEG Files List) - Blue:

Software (Software Files List)



You can select the storage device with INFO key.

You can do the additional functions with OPT+ key.

In these functions you can delete file and you can sort file lists by Alphabet, Date, or Size.













You can start recording a channel that you are watching by pressing RECORD(•) key. You can record 3 channels in same transponder



The default duration is set in PVR Setup Menu and file name is derived from channel information. You can change duration by pressing RECORD(•) key one more.



To stop recording, press STOP(•) key then you can stop recording by pressing OK key on the list that you want to stop or stop all recording by pressing RED key.

While you are recording channel, you cannot enter some menu (such as Installation, Media Setup, etc..)

5.5 Time Shift

Time Shift is a time-delayed broadcast of the channel that you are watching. To use time shift, the channel must be recorded. In other word, Time Shift option must be set to 1 or 2 Hour in PVR setup menu or you have to record the channel explicitly.

- 1) Pause a channel by pressing PAUSE(II) key while you are watching a channel, then you can see the shifted time in message
- 2) Resume the channel by pressing PAUSE() or PLAY() key later, then you can watch the time-delayed channel.
- 3) If you want to jump to live channel, please press STOP() key.



5.5 Time Shift



You can also shift a time with trick play key in normal mode and seek key in the Play Navigation. Please refer to Trick Play and Play Navigation.

5.6 Trick Play

You can change the playback speed while you are in time shift mode or watching a file playback.
You can use trick function in normal mode or progress bar. Trick play function supports fast forward, fast reverse and slow forward as follows.

- Slow Forward play(▶): ½x, ¼x, 1/8x

- Fast Reverse play(→): -x2, -x4, -x8, -x16, -x32, -x64 - Fast Forward play(→): x2, x4, x8, x16, x32, x64

If you press trick key repeatedly, playback speed is changed to each step and speed is changed to normal speed in last step. If you press PLAY(>>) key in slow or fast speed playback, then playback speed is changed to normal speed also.

5.7 Play Navigation



You can change the time position of playback in Play Navigation Bar.

To enter Play Navigation Bar, press PLAY(\triangleright) key while recording a channel or watching a file in normal speed.

To change the previous or next position of playback, press LEFT, RIGHT key in Play Navigation Bar.

You can also use trick play key in this bar.





5.8 Getting Ready

Please follow below steps to get ready for recording function.

Preparation

This function works with external HDD with Serial ATA interface (eSATA HDD).

Connecting eSATA HDD to the Set Top Box

- 1) Ensure the power of both devices are turned off.
- 2) Connect STB and eSATA HDD with eSATA Cable.
- 3) Turn on the eSATA HDD.
- 4) Turn on the STB.

Formating eSATA HDD with HDD Manager

Media Setup







HDD information

Format confirmation message box



Format complete







5.9 Recording

- 1) Press REC button on RCU.
- 2) Recording will be started with tiny message box on upper right side displaying recording time & channel name.
- 3) To stop recording, press STOP button on RCU.





- 4) **BACKGROUND RECORDING**: You can switch to other channel to watch it while recording (recording channel and watching channel should belong to same TP)
- 5) As you try to move channel in different TP, recording could be stopped with confirmation message box.





Recording CH: Luxe-TV-HD Live Viewing CH: RAI Interna

5.10 Play Back

- 1) To browse recorded files in HDD, go to FILE MANAGER MENU.
- $\label{eq:continuous} \mbox{2) Selecting one of them, small preview window opened and play automatically.}$

Recorded file lists



Small window preview Rename, Delete, Sort option available



5.10 Play Back

- 3) For full screen playback, press OK button on RCU
- 4) For playback information, press $m{i}$ button on RCU

full screen playback



playback information



Pause by II button



2X speed playback by ▶▶ button



5) **PLAYBACK while RECORDING**: You can playback recorded file while recording live channel. Start recording and then follow No.3 PLAYBACK procedure.



Playback file: LUXE-TV-SD Recording channel: LUXE-TV-HD





6. Appendix.

6.1 Troubleshooting

Problem	Solution
No display LED on the front panel. No power supply.	• Power cord plug in correctly.
No picture.	Ensure that the receiver is switched on.Check connection and correct.Check channel and video output and correct.
Poor picture quality.	Check the signal level, if it is low. Check that the RF cable is properly connected.
No sound.	 Check the volume level of the TV and receiver. Check the mute status of the TV and receiver. Check the connection of audio cable.
Remote control does not operate.	 Point remote control directly towards the receiver. Check and replace batteries. Check that nothing blocks the front panel.
Service is not running or scrambled.	Check that the smart card is appropriate for the selected service.
You have forgotten your secret PIN code.	• Refer to change PIN code of this user's manual.





6.2.1 Programing the Remote Control

There are two ways to program the remote control; Automatic Code Search or Direct Entry.

6.2.2 Using Automatic Code Search

- 1. Turn on the component(TV) you want to control.
- 2. Press and hold the TV button until the LED on the remote control turns on, then release the key.
- 3. Point the remote at the component(TV), press and release the UP button, then wait three seconds or until the LED stops flashing. At this point the remote control is searching for the correct code to program.

If, after three seconds, the component(TV) you want to control does not turn off, press and release UP button again to tell the remote to search the next set of codes.

Continue pressing and releasing UP button until the component turns off.

4. If the component you want to control does turn off: Press and release OK button, then the LFD blinks three times.

6.2.3 Using Direct Entry Method

- 1. Turn on the component(TV) you want to control.
- 2. Locate the enclosed Code List. Find your brand of the component you want to control.
- 3. Press and hold the TV button until the LED on the remote control turns on, then release the key.
- 4. Enter 3-digit code from the code list, then the LED blinks three times.
- 5. If you get no reponse, repeat these steps using the next code listed for your brand until the component reponds to the remote control command

6.2.4 Changing Volume Lock

Locking the volume controls to a single device makes it easier to control volume, without having to guess whether the volume will change. If you lock the remote's volume controls to the TV, you will always be able to change the volume to the level you want, without having to adjust it on multiple devices.

If you wnat to lock the volume for the TV system;

- 1. Press and hold the STB component key until the LED on the remote control turns on.
- 2. Enter 3-digit code, 999.
- 3. Press and release the STB component key, then the LED blinks three times.

Unlocking volume control;

If you want to unlock the volume for the STB component;

- 1. Press and hold the STB button until the LED on the remote control turns on.
- 2. Enter 3-digit code, 999.
- 3. Press and release the STB component key, then the LED blinks three times.





Brand List for TV

		i i	I			
[A] ACER	415	APOLLO 381	BINATONE	253	CINERAL	219 282
A MARK	222	AR 433 ARCAM 252 253	BLACK DIAMOND	208 346	CITIZEN	205 209 215 216 219
A.R. SYSTEM ABEX	208 286 409 206	ARCHER 222	BLACK PANTHER BLACK STRIP	329 394	CITY	242 267 273 224
ACCENT	208 286	ARDEN 208 286 387 ARISTONA 208 286	BLACKSTRIPE	242 296 298	CLAIRTONE	266
ACCUPHASE ACTION	208 313 325	ARTHUR-MARTIN 410	BLACKTRON	274	CLARIVOX	208 286 323 324 329 395
ACURA	224	ASA 360 361 370 373 378 395 397 398 399	BLACKWAY BLAUPUNKT	274 250 251 269 389	CLATRONIC	208 224 253 270 286
ADMIRAL	230 244 270 275 309 323 397 410	ASBERG 208 286 329 396	BLUE SKY	250 251 269 389 208 254 274 286 346	CLAYTON	308 329 374 387 396 346
ADYSON	206 253	ASORA 224 ASTRA 208 286		387 388 389 400	CME	207 208 218 224 225
AEA AGASHI	208 286 253 270	ASUKA 253 254 270 274	BLUE STAR BOOTS	274		241 244 253 255 256 258 275 278 285
AGASHI	384	ATLANTIC 208 286 308 ATORI 224	BOSCH-BAUER	308	CMS HIGHTEC	258 275 278 285
AGEF AIKO	397 208 218 219 224 253	AUCHAN 410	BPL	208 274 286 409	CONCERTO	215
AIKO	270 286 307 394	AUDINAC 289 AUDIOSONIC 208 224 253 270 286	BRADFORD BRINKMANN	262 208 286 323 376 400	CONCORDE	224 208 224 270 274 286
AIM	208 218 286 331	374 376 380 387 388	BRIONVEGA	208 286 397 408	CONDON	308 312 323 329 374
AIWA AKAI	348 349 393 205 208 218 224 229	AUDIOTON 253 270 374 376 380 AUDIOVOX 219 222 262 282	BRITANNIA BROCKWOOD	252 253 229	CONIC	410 313
	253 270 286 296 299 307 309 325 346 377	AUMARK 216	BROKSONIC	222 257 283	CONRAD	208 286
	382 384 385 386 387	AUSIND 379 396 AUTOVOX 253 258 275 307 378	BROTHER	270	CONTEC	207 208 224 252 262 266 270 286
AKIRA	388 394 410 208 274 286 389	396 397 405	BRUNS BSR	328 380 397 303 307 311 410	CONTINENTAL EDISON	351
AKITO	208 286	AWA 208 224 253 270 286 331 385	BTC	254	COSMEL	208 224 286
AKURA	208 224 254 270 274 286 331 400 407	AXXENT 224	BUSH	207 208 224 253 254 270 274 286 296 303	CRAIG CRIPTOVISION	262 295
ALARON	252 261 265	AXXON 387 [B]		307 309 310 346 387	CROSLEY	213 313 362 396 397
ALBA	207 208 224 254 286	BAJRD 218 253 296	[C]	400 401 405 410	CROWN	410 208 209 224 262 286
	310 323 346 374 400 410	BANG&OLUFSEN 397 BANCO 284 410	CANDLE CAPEHART	205 215 267 325	CHOTH	296 323 329 374 376
ALCYON	396	BASIC LINE 208 224 253 254 274	CAPSONIC	270		385 387 388 396 404 407 409
ALKOS ALLORGAN	394 253 311	286 389 400 410 BASTIDE 253	CARAD	208 286 400	CS ELECTRONICS	252
ALLSTAR	208 286	BAUR 208 285 286 287 292	CARENA CARNIVALE	208 286 389 205	CTC CURTIS MATHES	308 205 209 210 211 213
AMBASSADOR AMPLIVISION	241 253 374	298 307 309 405 BAYSONIC 262	CARREFOUR	207 208 286 395	CONTENENTIES	215 216 226 230 236
AMSTRAD	208 224 241 249 270	BAZIN 253	CARVER CASCADE	213 248 208 224 286	CXC	239 242 246 282 296 262
	286 331 346 355 384 408	BEAUMARK 229 260 BEC 309 313 325	CASIO	208 286 405 410	CYBERTRON	254
ANAM	208 223 224 262 286	BECRESE 242 298 299 309 313	CATHAY CCE	208 286 208 253 277 286	[D]	
ANAM NATIONAL ANGLO	208 214 286	BEKO 208 286 374 376 380 385 387 388 394	CCI	318	DAEWOO	208 209 219 224 229
ANITECH	208 224 270 274 286	BELCOR 229	CENTRUM CENTURION	346	1	253 282 286 333
ANSONIC	329 396 208 224 286 312 329	BELL & HOWELL 226 239 296 BEON 208 286 323	CENTURION	208 286 397	DAINICHI	254 208 224 253 270 286
	374 380 398 400 410 413	BERTHEN 400 BEST 374	CGE CIE	291 323 374 396 410 333	DANSETTE	394 331
AOC	205 222 229 266	BESTAR 208 286 374	CIMLINE	224 310	DANTAX	374 376 385 387 388
		1			1	
DATSURA DAWA	296 409 208 286	ELIN 208 224 286 307 398 399 405 410	FLINT	208 218 270 286 389	GORENJE	374
DAWA DAYTON	208 286 224	399 405 410 ELITE 208 242 254 286 296	FLINT FNR FORMENTI	329 208 286 293 308 376	GORENJE GPM GRADIENTE	254 208 212 215 248 280
DAWA DAYTON DAYTRON	208 286 224 208 209 229 286 298	399 405 410 ELITE 208 242 254 286 296 308	FNR FORMENTI	329 208 286 293 308 376 396 397 410	GPM GRADIENTE	254 208 212 215 248 280 286
DAWA DAYTON	208 286 224 208 209 229 286 298 296 410 208 218 253 286 326	399 405 410 ELITE 208 242 254 286 296 308 ELMAN 329 ELTA 224 270	FNR	329 208 286 293 308 376	GPM	254 208 212 215 248 280 286 308 208 244 286 307 309
DAWA DAYTON DAYTRON DE GRAAF	208 286 224 208 209 229 286 298 296 410	399 405 410 ELITE 208 242 254 286 296 308 ELMAN 329 ELTA 224 270 EMERSON 208 209 229 239 241	FNR FORMENTI FORMENTI-PHOENIX	329 208 286 293 308 376 396 397 410 362 379 397 208 286 374	GPM GRADIENTE GRADIN GRAETZ	254 208 212 215 248 280 286 308 208 244 286 307 309 404 410
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO	208 286 224 286 298 209 229 286 298 296 410 208 218 253 286 326 384 208 286 270	399 405 410 ELITE 208 242 254 286 296 308 ELMAN 329 ELTA 224 270 EMERSON 208 209 229 239 241 257 260 261 262 263 264 265 266 271 273	FNR FORMENTI FORMENTI-PHOENK FORTRESS FRABA FRIAC	329 208 286 293 308 376 396 397 410 362 379 397 208 286 374 208 224 286 329 374	GPM GRADIENTE GRADIN	254 215 248 280 286 250 244 286 308 208 244 286 307 309 404 410 208 218 253 286 296 299 325 381 384 396
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO DENON	208 286 224 28 209 229 286 298 296 410 208 218 253 286 326 270 236	399 405 410 ELITE 208 242 254 286 296 308 ELMAN 329 ELTA 224 270 EMERSON 208 209 229 239 241 257 260 261 262 263	FNR FORMENTI FORMENTI-PHOENIX FORTRESS FRABA	329 208 286 293 308 376 396 397 410 362 379 397 208 286 374	GPM GRADIENTE GRADIN GRAETZ GRANADA	254 218 215 248 280 286 308 244 286 307 309 404 410 208 218 253 286 296 299 325 381 384 396 404 406 407 410
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO	208 286 224 286 298 209 229 286 298 296 410 208 218 253 286 326 384 208 286 270	ELITE 080 5410 208 242 254 268 296 308 ELMAN 329 ELTA 224 270 208 209 29 319 241 272 263 266 571 223 274 283 266 307 374 376 395 396 397 410 EMPEROR 274	FNR FORMENTI FORMENTI-PHOENK FORTRESS FRABA FRIAC	329 208 286 293 308 376 396 397 410 362 379 397 208 286 374 208 224 286 329 374 224 244 253 270 309 405 410	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN	254 215 248 280 286 308 208 244 286 307 309 404 410 208 218 253 286 296 299 325 381 384 396 404 406 407 410 208 224 274 286 387 388 389 400 410
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO DENON DENVER	208 286 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 270 236 208 286 385 208 224 286 308 397 208 286	BLITE 090 5410 ELITE 200 242 254 286 296 308 ELIMAN 329 ELTA 224 270 EMERSON 200 209 229 239 241 257 260 261 262 263 274 283 286 307 374 274 283 286 307 374 EMPEROR 274 EMPEROR 274 ENVISION 205	FNR FORMENTI FORMENTI FORTRESS FRABA FRIAC FRONTECH	329 208 286 293 308 376 396 397 410 362 379 397 208 286 374 208 224 286 329 374 224 244 253 270 309 405 410	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC	254 212 215 248 280 286 308 244 286 307 309 404 410 208 245 253 226 296 299 325 381 384 396 404 406 407 412 266 387 388 389 400 410 253 329 410
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO DENON DENVER DESMET DIAMANT DIAMOND	208 286 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 270 236 208 286 385 208 224 286 308 397 208 286 270 401	ELITE 080 5410 208 242 254 268 296 308 ELMAN 329 ELTA 224 270 208 209 29 319 241 272 263 266 571 223 274 283 266 307 374 376 395 396 397 410 EMPEROR 274	FNR FORMENTI FORMENTI FORTRESS FRABA FRIAC FRONTECH	329 208 208 208 208 208 208 208 208 208 208	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN	254 215 248 280 286 308 208 244 286 307 309 404 410 208 218 253 286 296 299 325 381 384 396 404 406 407 410 208 224 274 286 387 388 389 400 410
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO DENON DENVER DESMET DIAMANT DIAMOND DIGATRON	208 286 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 270 236 208 286 385 208 224 286 308 397 208 286	BLITE 208 242 254 286 296 BLMAN 329 BLT 208 242 270 BLMSN 329 BLT 329 BLT 327 208 209 227 239 241 BLMSSO 329 209 209 208 208 208 277 283 268 309 307 374 BLMPEROR 274 BLMSSON 205 BRES 208 286 ESC 208 285 286 ESC 208 285 286 ESTELE 410	FNR FORMENTI FORMENT-HORIK FORTRESS FRABA FRIAC FRONTECH FUJITSU	329 208 283 308 376 396 397 410 396 397 410 396 397 410 396 397 410 396 397 410 397 397 397 397 397 397 397 397 397 397	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG	254 212 215 248 280 286 308 244 286 307 309 404 410 253 286 296 299 325 381 384 396 404 406 407 410 208 224 274 286 387 388 389 400 410 253 329 410 253 329 410 253 329 410 253 329 410 353 364 302 354 357 370 374 395
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO DENON DENVER DESMET DIAMANT DIAMOND	206 286 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 270 236 208 286 385 208 224 286 308 397 208 286 270 401 208 286	BLITE 208 242 254 286 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 293 294 257 260 261 262 263 274 283 266 307 374 EMERSON 205 ERRES 208 286 ESTELE 410 EITRON 208 224 286 410	FINR FORMENT FORMENT-PICENC FORTHESS FRABA FRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUJITSU GENERAL	329 C86 283 308 376 397 410 362 379 397 208 286 374 224 224 225 270 309 405 410 226 224 224 225 240 252 242 253 261 286 307 325 329 410 422 423 242 252 242 253 410	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC	254 208 212 215 248 280 286 286 307 309 308 208 244 286 307 309 404 410 208 218 253 286 296 294 295 253 284 389 400 410 208 224 274 286 387 285 329 410 208 224 250 288 269 286 337 373 374 395 286 337 374 395
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO DENON DENVER DESMET DIAMANT DIAMANT DIGATRON DIGITION DIGITION DIGITION	208 266 244 208 209 286 298 296 410 208 218 253 286 326 384 208 266 270 236 286 286 385 208 224 286 308 397 208 286 208 286 208 286 208 286 208 286 307	BLITE JOB 242 254 266 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 292 339 241 257 260 261 262 263 274 283 266 307 374 EMPEROR 274 EMPEROR 274 ENVISION 205 ERRES 208 266 ESTELE 410 EIRO-FEEL 252 270 EURO-FEEL 252 70 EURO-FEEL 252 70 EURO-FEEL 252 70 EURO-FEEL 208 274 266 410 EURO-FEEL 252 70 EURO-FEEL 268 270 286 374	FNR FORMENTI TORNENT-HORIK FORTHESS FRABA FRIAC FRONTECH FUJITSU FUJIT	329 208 293 308 376 368 397 410 362 379 397 208 286 374 224 286 329 374 224 244 253 270 309 405 410 422 423 224 253 410 422 423 224 253 410 422 423 214 313 430	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNPY [H]	254 209 212 215 248 280 286 286 286 287 298 212 215 248 280 208 244 410 208 218 253 286 296 249 245 246 387 389 389 400 410 208 212 427 246 387 388 389 400 410 208 224 250 258 258 258 258 258 258 258 258 258 258
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO DENON DENVER DESMET DIAMANT DIAMOND DIGATRON DIGILINE DIGITOR DIGIVISION DIK	208 266 224 208 209 229 286 298 206 410 208 218 253 286 326 384 208 286 208 286 208 286 385 270 401 208 286 208 286 208 286 207 401 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286	ELITE 208 242 254 286 296 ELMAN 329 ELTA 224 270 EMERISON 208 292 293 241 257 260 261 262 263 EMERISON 208 299 299 241 257 260 261 262 263 274 283 268 307 374 EMPEROR 274 ENVISION 205 ERES 208 286 ESC 208 285 286 ESC 208 285 286 ESTELE 410 ETRON 208 246 410 EURO-AEC 253 270 EUROMANN 208 253 270 286 374 EUROMANN 208 253 270 286 374 EUROMANN 208 253 270 286 374	FINR FORMENT! FORMENT-HERK FORTRESS FRABA FRIAC FRONTECH FUJITSU	329 286 293 308 376 396 397 410 396 397 410 396 397 410 396 397 410 396 396 397 410 396 396 397 424 244 253 270 309 405 410 396 396 397 325 329 410 422 423 410 422 423 410 422 423 410 422 423 410 422 423 410 422 425 410 422 425 410 422 426 261 262 270 311 331 400 208 286 262	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNPY [H] HAIER	254 208 212 215 248 280 286 286 286 287 287 287 287 287 287 287 287 287 287
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO DENKO DENON DENKER DESMET DIAMANT DIAMOND DIGITION DIGITION DIGITION DIGITION DIGITION DIGITION DIK DIX	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 208 286 208 286 385 208 224 286 308 397 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 288	ELITE 208 242 254 286 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 292 239 241 257 260 261 1262 263 EMERSON 208 209 229 239 241 257 260 261 1262 263 267 255 260 261 1262 263 267 267 268 268 EMPEROR 274 ENVISION 205 ERRES 208 286 ESC 208 286 ESC 208 286 ESC 208 286 ESTEL 840 ETROM 208 224 286 410 ETROM 208 224 286 410 EUROPEROR 209 286 EUROPHON 208 253 270 286 374 EUROPHON 208 253 270 286 374 EUROPHON 208 253 270 286 374	FINR FORMENTI ROBBENT-HOOME FORTRESS FRABA FIRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUTURE	209 286 293 308 376 396 397 410 396 397 410	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNPY [H]	254 209 212 215 248 280 286 286 286 287 298 212 215 248 280 208 244 410 208 218 253 286 296 249 245 246 387 389 389 400 410 208 212 427 246 387 388 389 400 410 208 224 250 258 258 258 258 258 258 258 258 258 258
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENKO DENNO DENWER DESMET DIAMANT DIAMOND DIGATRON DIGITIOR	208 266 224 208 209 229 286 298 206 410 208 218 253 286 326 384 208 286 208 288 208 286	ELITE 080 242 254 286 296 ELMAN 329 ELMA 329	FNR FORMENTI ROMENTHACENE FORTRESS FRABA FRIAC FRONTECH FUJITSU FUJISU GENERAL FUNKAI FUTURE FUTURETECH [G]	329	GPM GRADIENTE GRADIEN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNPY [H] HAIER HALIEAX HALIFAX HALMARK	254 (200 212 215 248 280 286 286 286 287 309 210 210 210 210 210 210 210 210 210 210
DAWA DAYTON DAYTRON DE GRAAF DECCA DEITRON DENNO DENNO DENNO DENSO DENSO DESMET DIAMANT DIAMANT DIAMOND DIGITION DIGITI	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 208 286 385 208 224 286 308 397 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 288 208 286 208 28	ELITE 208 242 254 286 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 292 239 241 257 260 261 1262 263 EMERSON 208 299 239 241 257 260 261 1262 263 278 295 396 397 410 EMPEROR 274 ENVISION 205 ERRES 208 286 ESC 208 286 ESC 208 286 ESTELE 410 EITRON 208 224 286 410 EITRON 208 224 286 410 EITRON 208 235 270 286 374 EURO-FERD 209 286 EVERT 410	FNR FORMENTI FORMENTI FORMENTHEORY FORTHESS FRABA FRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUJITSU FUTURE FUTURETECH [G] GALAXI GALAXI GALERIA	329 268 293 308 376 396 397 410 396 397 410 396 397 410 397 41	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNPY [H] HAIER HALIEAX HALIMARK HAMPTON	254 208 212 215 248 280 286 286 286 287 309 288 244 241 268 277 309 268 287 247 241 241 241 241 241 241 241 241 241 241
DAWA DAYTON DAYTON DE GRAAF DECCA DEITRON DENVER DENVER DESMET DIJAMANT DIJAMOND DIGGITION DIXI DIXI DIXI DIXI DIXI DIXI DOMEOS DOMEOS DOMEOS	208 266 224 208 209 229 286 298 295 410 208 218 253 286 326 384 208 286 208 286 208 286 385 208 224 286 308 397 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 287 209 208 288 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 288 20	ELITE 200 242 254 286 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 292 339 241 257 260 261 262 263 274 283 286 237 276 EMERSON 205 293 396 397 410 EMERSON 205 ERRES 208 283 286 ESTELE 410 ETRON 205 220 224 286 410 ETRON 205 252 70 286 374 EUROPAN 208 252 70 286 374 EUROPAN 208 256 329 384 EXCEL 208 286 EXPERT 410 EXQUISIT 208 286	FINR FORMENTI ROBBINI-HICORY FORTRESS FRABA FIRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUTURE FU	329	GPM GRADIENTE GRADIEN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNPY [H] HAIER HALIEAX HALIFAX HALMARK	254 208 212 215 248 280 286 286 286 287 307 309 208 244 286 307 309 208 244 240 410 268 218 253 246 296 246 247 246 387 389 389 400 410 253 254 254 254 256 387 399 400 256 254 270 370 374 395 261 262 270 401 270 270 270 262 270 262 272 262 262 262 262 262 262 262 262
DAWA DAYTON DAYTRON DE GRAAF DECCA DETRON DENKO DENKO DENNON DENVER DESMET DIAMOND DIGATRON DIGILINE DIGITOR DIGITOR DIGITOR DIGITOR DORIC DTS DORIC DTS DUAL DUAL TEC	208 266 224 208 209 229 286 298 295 410 208 218 253 286 326 384 208 286 208 286 208 286 308 397 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 287 208 288 208 28	ELITE 208 242 254 286 296 ELMAN 329 210 224 286 296 ELMAN 329 210 229 239 241 EMERSON 208 209 239 241 208 208 208 208 208 208 208 208 208 208	FNR FORMENTI FORMENTI FORMENTHEORY FORTHESS FRABA FRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUJITSU FUTURE FUTURETECH [G] GALAXI GALAXI GALERIA	329 208 288 293 308 376 396 397 410 396 397 410 397 41	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNPY [H] HAIER HALIEAX HALIMARK HAMPTON	254 208 212 215 248 280 286 286 286 287 309 208 244 286 307 309 208 244 286 307 309 208 244 286 296 296 296 296 296 296 296 296 296 29
DAWA DAYTON DAYTRON DE GRAAF DECCA BEITRON DENVER DENVER DESMET DIAMOND DIGATRON DIGGILINE DIGITOR DIGITOR DIGITOR DIGITOR DIGITOR DIGITOR DIXI DUAL DUAL DUAL LE DUAL LE DUAL LE DUMINT	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 208 286 208 286 385 200 208 286 207 401 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 288 208 283 209 288 208 288 208 288 208 288 208 288 208 288 208 288 208 283 208 288 208 28	ELITE 200 242 254 286 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 292 339 241 257 260 261 262 263 274 283 286 237 276 EMERSON 205 293 396 397 410 EMERSON 205 ERRES 208 283 286 ESTELE 410 ETRON 205 220 224 286 410 ETRON 205 252 70 286 374 EUROPAN 208 252 70 286 374 EUROPAN 208 256 329 384 EXCEL 208 286 EXPERT 410 EXQUISIT 208 286	FINR FORMENTI ROBBINI-HICORY FORTRESS FRABA FIRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUTURE FU	329	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNDIG GRUNDIG HAIERA HALERAX HALLBAX HALMAFON HAMSEATIC HANTAREX	254 28 28 28 28 28 28 28 28 28 28 28 28 28
DAWA DAYTON DAYTRON DAYTRON DE GRAAF DECCA BEITRON DENKO DENON DENVER DESMET DIAMAND DIGATRON DIGATRON DIGATRON DIGILINE DIGITOR DIGIUTOR DIGIVES DOMEOS DOMIC DTS DUAL DUAL DUAL DUAL DUAL DUAL DUANTE DUMINT DUMONT	208 266 224 208 209 229 286 298 206 410 208 218 253 286 326 384 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 288 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 282 208 286 208 286 208 286 208 286 208 286 208 283 207 400 208 283 286 307 405 244 55 244 55 25 268 272 27 272 253 287 287 287 287 287 287 287 287 287 288 287 288 287 288 287 288 287 288 288	ELITE 208 242 254 286 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 292 239 241 257 260 261 1262 263 EMERSON 208 292 297 127 257 260 261 1262 263 257 267 267 267 267 277 EMPEROR 274 ENVISION 205 ERRES 208 286 ESC 208 286 ESC 208 286 ESTELE 410 ETRON 208 274 286 410 ETRON 208 274 286 410 EUROPHON 208 253 270 286 374 EUROPHON 208 253 270 286 374 EUROPHON 208 285 286 EUROPHON 208 286 EVERT 410 EXCEL 208 286 EXPERT 410 EXCEL 208 286 EXPERT 410 EXCEL 208 286 EMERT 410 EXCEL 208 286 FAMILY LIFE 208 286 FENNER 224	FNR FORMENTI ROMENTHONK FORTRESS FRABA FRIAC FRONTECH FUJITSU FUTURE FUTURE FUTURE FUTURE FUTURE FUTURE GALAXI GALAXI GALAXI GALERIA GRC GE	329	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNPY [I-I] HAIER HALEAX HALMARK HAMPTON HANSEATIC HANTAREX HANTOR	254 268 270 248 280 286 286 286 286 287 309 288 281
DAWA DAYTON DAYTRON DAYTRON DAYTRON DE GRAAF DECCA DETIRON DENKO DENNON DENVER DESMET DIJAMANT DIJAMANT DIJAMOND DIGITION DIGITI	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 384 384 208 286 208 226 208 228 286 208 228 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 287 208 288 208 28	ELITE 2008 242 254 286 296 ELMAN 329 ELTA 329 ELTA 224 270 EMERSON 208 209 227 239 241 257 260 260 262 262 263 274 283 268 307 374 EMPEROR 274 ENVISION 205 ESTELE 410 ETRON 208 224 286 410 ETRON 208 226 253 270 286 374 EUROPHON 208 254 286 410 EUROPHON 208 254 286 410 EUROPHON 208 268 ERNEWE 224 ERREGUSON 208 268 307 394 398	FNR FORMENTI ROBRENTI-ROBRE FORTRESS FRABA FIRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUTURE FUTURE FUTURE FUTURE FUTURE GALAXI GAL	209 286 293 308 376 396 397 410 397 397 397 398 398 374 208 286 374 228 244 253 270 309 408 284 286 329 374 208 284 285 270 309 408 284 285 329 410 422 436 329 410 422 437 424 268 278 208 286 307 329 410 208 286 323 329 352 374 224 224 309 362 410 201 203 210 211 214 224 309 362 410 201 203 210 211 214 224 309 362 410 201 203 210 211 214 224 309 362 410 201 203 210 211 214 208 286 323 329 352 374 224 226 299 362 378 389 365 373 374 227 228 288 388 389	GPM GRADINTE GRADIN GRAETZ GRANDO GRADIN GRADIN GRONIC GRUNDIG GRUNDIG GRUNDIG GRUNDIG HAIE HALEAX HALEAX HALEAX HALMAR HANDTON HANSATAEX HANTOR HARTORISSON HAITORISSON	254 28 28 28 28 28 28 28 28 28 28 28 28 28
DAWA DAYTON DAYTRON DAYTRON DE GRAAF DECCA BEITRON DENKO DENON DENVER DESMET DIAMAND DIGATRON DIGATRON DIGATRON DIGILINE DIGITOR DIGIUTOR DIGIVES DOMEOS DOMIC DTS DUAL DUAL DUAL DUAL DUAL DUAL DUANTE DUMINT DUMONT	208 266 224 208 209 229 286 298 206 410 208 218 253 286 326 384 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 288 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 282 208 286 208 286 208 286 208 286 208 286 208 283 207 400 208 283 286 307 405 244 55 244 55 25 268 272 27 272 253 287 287 287 287 287 287 287 287 287 288 287 288 287 288 287 288 287 288 288	ELITE 2008 242 254 286 296 ELMAN 329 EITA 224 270 EMERSON 208 209 229 239 241 257 260 262 262 263 267 EMERSON 208 209 229 239 241 257 260 262 262 263 257 283 266 307 374 EMPEROR 274 ENVISION 205 ERRES 208 286 ESC 208 283 286 ESC 208 283 286 ESTELE 410 ETRON 208 224 26 410 EURO-FEE 253 270 EUROMANN 208 253 270 286 374 EUROPHON 208 268 EUROPHON 208 266 EUROPHON 208 286 ERNEW 208 286 FENNER 224 FERGUSON 208 268 307 394 398 FIDELITY 208 268 307 394 398 FIDELITY 208 252 270 286 287	FNR FORMENTI FORMENTI FORMENTHACENIC FORTRESS FRABA FRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUJITSU FUTURE FUTURETECH [G] GALAXI GALAXI GALAXI GALAXI GALERIA GBC GE GEANT CASIONO GEC GELOSO	329	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNDIG GRUNDIG HALEAX HALLEAX HALL	254 268 278 248 280 280 280 284 286 307 309 208 244 286 307 309 208 244 286 387 308 296 245 286
DAWA DAYTON DAYTRON DAYTRON DE GRAAF DECCA DEITRON DENNON DENNON DIGNON DIGNON DIGITON DIGITO	208 266 224 208 209 229 286 298 206 410 208 218 253 286 326 384 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 287 208 288 208 288 208 288 208 289 208 289 208 280 208 286 208 287 208 287 208 288	ELITE 208 242 254 286 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 297 297 241 257 260 261 1 262 263 EMERSON 208 292 297 177 273 EMERSON 208 298 397 410 EMPEROR 274 ENVISION 205 ERRES 208 286 ESC 208 253 286 410 EIRO-FERON 208 254 286 410 EIRO-FERON 208 254 286 410 EIRO-FERON 208 268 410 EIRO-FERON 208 286 ESC 208 286 374 EUROPHON 208 286 EXPERT 410 EXCEL 208 286 EXPERT 410 EXCEL 208 286 EXPERT 410 EXCEL 208 286 FAMINUTIFE 208 286 FAMINUTIFE 208 286 FAMINUTIFE 208 286 FENNER 224 FREGUSON 208 286 307 394 398 FIDELITY 208 285 270 286 287 FENSER 208 285 270 286 287 FILSAI 253 31 410 FILSAI 253 31 410	FINR FORMENTI FORMENTI FORMENTI-CONK FORTRESS FRABA FRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUJITSU FUJITSU FUJITSU FUJITSU GALANI GALANI GALANI GALANI GALANI GALANI GALERIA GBC GBC GEANT CASIONO GEC GELOSO GREBAN ITCHNIC	209 286 293 308 376 396 397 410 397 397 397 398 398 374 208 286 374 228 244 253 270 309 408 284 286 329 374 208 284 285 270 309 408 284 285 329 410 422 436 329 410 422 437 424 268 278 208 286 307 329 410 208 286 323 329 352 374 224 224 309 362 410 201 203 210 211 214 224 309 362 410 201 203 210 211 214 224 309 362 410 201 203 210 211 214 224 309 362 410 201 203 210 211 214 208 286 323 329 352 374 224 226 299 362 378 389 365 373 374 227 228 288 388 389	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRONIC GRUNDIG GRUNDIG GRUNDIG GRUNDIG HAIEAX HAI	254 280 280 280 280 280 280 284 286 307 309 404 410 43 280 280 284 286 307 309 404 410 43 280 280 284 284 286 287 307 308 288 389 400 410 253 329 410 253 329 410 262 286 237 307 374 395 396 402 281 262 28 287 307 308 309 311 282 270 280 224 286 327 307 308 309 311 282 270 280 282 283 284 286 287 307 308 309 311 282 274 286 287 307 308 309 311 282 274 286 287 307 308 309 311 282 274 286 287 307 308 309 311 282 276 288 288 389 399 384 286 287 307 308 309 311 282 282 288 288 288 389 399 384 286 288 288 288 389 399 384 286 288 288 288 389 389 389 389 389 389 389 389 389 3
DAWA DAYTON DAYTRON DAYTRON DECRAAP DECCA DETIRON DENIXO DIAMOND DIGATRON DIGILINE DIGITOR DIGILINE DIGITOR DIGIVISION DIX DOMEOS DONIC DIS DUAL DUAL DUAL DUAL DUAL DUAN DI UX DUAN DUA	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 208 287 208 287 208 288 208 286 208 286 208 286 208 286 208 286 208 287 208 287 208 287 208 287 208 287 208 287 208 287 208 287 208 287 208 288 208 286 208 286	ELITE 2008 242 254 286 296 ELMAN 329 EITA 224 270 EMERSON 208 209 229 239 241 257 260 262 262 263 267 EMERSON 208 209 229 239 241 257 260 262 262 263 257 283 266 307 374 EMPEROR 274 ENVISION 205 ERRES 208 286 ESC 208 283 286 ESC 208 283 286 ESTELE 410 ETRON 208 224 26 410 EURO-FEE 253 270 EUROMANN 208 253 270 286 374 EUROPHON 208 268 EUROPHON 208 266 EUROPHON 208 286 ERNEW 208 286 FENNER 224 FERGUSON 208 268 307 394 398 FIDELITY 208 268 307 394 398 FIDELITY 208 252 270 286 287	FNR FORMENTI FORMENTI FORMENTHACENIC FORTRESS FRABA FRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUJITSU FUTURE FUTURETECH [G] GALAXI GALAXI GALAXI GALAXI GALERIA GBC GE GEANT CASIONO GEC GELOSO	329	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNDIG GRUNDIG HALEAX HALLEAX HALL	254 280 280 280 280 280 280 280 280 280 280
DAWA DAYTON DAYTRON DAYTRON DECGRAPE DECCA DETIRON DETIRON DENNOR DENNOR DENNOR DESMET DIAMANT DUMANT DU	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 385 208 224 286 308 397 208 286 385 207 401 208 286 286 208 286	ELITE 208 242 254 286 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 293 291 241 257 260 261 262 263 EMERSON 208 295 297 393 241 257 260 261 262 263 EMERSON 208 296 397 410 EMPEROR 274 ENVISION 205 ERRES 208 286 ESC 208 285 286 ESC 208 285 286 ESC 208 285 286 ESTELE 410 ETRON 208 264 410 EURO-PER 208 286 EURO-PER 208 286 EURO-PER 208 286 EURO-PHON 208 266 EURO-PHON 208 267	FNR FORMENTI FORMENTI FORMENTHEORY FORTRESS FRABA FRIAC FRONTECH FUJITSU FUJITSU FUTURE FUTURE FUTURE FUTURETCH [G] GALAXI GALAXIS GALERIA GBC GE GEANT CASIONO GEC GELOSO GRERAL TCORNS GENESS GENEXXA	329 268 293 308 376 396 397 410 396 397 410 396 397 410 396 397 410 396 397 410 396 397 410 396	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNDIG GRUNDIG GRUNDIG HALERA HALERA HALERA HALERA HALHAMPTON HANSEATIC HANTAREX HANTOR HARIENARIKARON HARWARD HARWADD HARWOOD HARWOOD HARWOOD HARWOOD HARWAGE HCM	254 268
DAWA DAYTON DAYTRON DAYTRON DAYTRON DECRAAP DECCA DETRON DENKO DENKO DENKO DENKO DENKO DENMO DIGATRON DUAL TEC DUMINIT DUMAN DUAL TEC DUMINIT DUNA DUAL TEC DUMINIT DUAL TEC DUMINI	208 266 224 208 209 229 286 298 206 410 208 218 253 286 326 384 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 287 400 208 287 400 208 287 400 208 288 208 286	ELITE 208 242 254 286 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 297 293 241 257 260 261 262 263 297 EMERSON 208 292 297 397 410 EMERSON 208 298 397 410 EMPEROR 274 ENVISION 205 ERES 208 286 ESC 208 285 286 ESTELE 410 ETRON 208 224 286 410 EIROPACE 208 286 EUROPHON 208 252 270 286 374 EUROPEROR 208 286 EUROPHON 208 258 287 EUROPHON 208 268 EUROPHON 208 268 EUROPHON 208 286 EUROPHON 208	FINR FORMENTI FORMENTI FORMENTI FORMENTI FORMENTI FORTEES FRABA FRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUTURE FUTURE FUTURE FUTURE FUTURE FUTURE GALAXI GALA	329 268 293 308 376 396 397 410 396 397 410 396 397 410 396 397 410 396 397 410 396 397 410 396 397	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNDIG GRUNDIG GRUNDIG HAHER HALEAX HALLMARK HALHARY HANSEATIC HANTEREX HANTOR HARIEPAMBOON HARWAGDON HARW	254 280 280 280 280 280 280 280 280 280 280
DAWA DAYTON DAYTRON DAYTRON DECGRAPE DECCA DETIRON DETIRON DENNOR DENNOR DENNOR DESMET DIAMANT DUMANT DU	208 268 299 229 286 298 296 240 240 250 240 240 250 240 250 250 260 250 250 250 250 250 250 250 250 250 25	ELITE 2008 242 254 286 296 ELMAN 329 ELTA 32	FINR FORMENTI FORMENTI FORMENTI FORMENTI FORTHESS FRABA FRIAC FRONTECH FUJITSU FUJISU GENERAL FUNKAI FUTURE FUTURETECH [G] GALAXI GALAXI GALAXI GALAXI GALERIA GBC GE GEANT CASIONO GEC GENERAL GENESS	329	GPM GRADIENTE GRADIN GRAETZ GRANDIN GRAETZ GRANDIN GRONIC GRONIC GRUNDIG GRUNDIG GRUNDIG GRUNDIG HAIER HALEAX HALEAX HALEAX HALEAX HALMARTON HANGANIC HANTON HANGANIC H	254 268 280
DAWA DAYTON DAYTRON DAYTRON DECGRAPE DECCA DETIRON DENNOR DENNOR DENNOR DENNOR DESMET DIAMANT DUMANT DUMANT DUMANT DUMANT DUMANT DUNANT DUN	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 287 209 288 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 288 208 28	ELITE 208 242 254 286 296 ELMAN 329 ELTA 224 270 EMERISON 208 292 293 241 257 260 261 262 263 EMERISON 208 295 297 397 410 EMERISON 205 ERPEROR 274 ENVISION 205 ESTELE 410 ETRON 208 268 410 EURO-PERO 208 268 307 374 EURO-PEROR 208 268 ENPERT 208 268 ENPERT 208 268 ENPERT 208 268 ENPERT 208 286 ENMIX UTE 208 286	FINR FORMENTI FORMENTI FORMENTI FORMENTI FORMENTI FORTEES FRABA FRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUTURE FUTURE FUTURE FUTURE FUTURE FUTURE GALAXI GALA	329	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNDIG GRUNDIG GRUNDIG GRUNDIG HALERA HALERA HALERA HALERA HALERA HALMFON HAMSEATIC HANTERE HAMPTON HARVARD HARWOOD HARWOOD HARWOOD HARWOOD HEDZON HEMA HEMMERMINE	254 268 278 288 280 280 280 281 281 281 281 282 282 283
DAWA DAYTON DAYTRON DAYTRON DAYTRON DE GRAAF DECCA DETTRON DENNON DENNON DENNON DIGATRON DIG	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 209 280 209 280 209 280 209 280 209 280 200 28	ELITE 080 240 5410 ELIMAN 224 274 286 296 ELMAN 224 270 282 286 ELMAN 224 270 282 286 EMERSON 205 229 239 241 260 262 263 266 271 272 274 283 286 367 374 376 EMPEROR 274 ENVISION 205 ERRES 208 286 ESC 208 286 ESC 208 286 ESC 208 286 ESTELE 410 ETRON 208 224 286 410 EURO-FEL 253 270 EUROMANN 208 253 270 286 374 EUROPHON 208 286 EWRETT 410 EXCLE 208 286 EMPEROR 208 286 ENNILY UIFE 208 286 ENNILY UIFE 208 286 ENNILY UIFE 208 286 ENNILY UIFE 208 286 ENNILY 208 286 ENNILY UIFE 208 286 ENNILY 208 ENNI	FINR FORMENTI FORMENTI FORMENTI FORMENTI FORMENTI FORTEES FRABA FRIAC FRONTECH FUJITSU FUJITSU FUTURE FUTURE FUTURE FUTURE FUTURE FUTURE GALAXI GALAXI GALAXI GALAXI GALAXI GE GE GE GEANT CASIONO GEC GEOSO GERBA TICHNIC GENEZIA GIANT GIBRALTER GO VIOPO GOLDFUNK	329	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNDIG GRUNDIG GRUNDIG GRUNDIG HALEAX HALLAX HALLAX HALLAX HALLASA HALMARIN HAMPTON HANSEATIC HANTABEX HANTOR HARITABESON HARWAGOON HARWAGOON HARWAGOON HARWAGOON HEMA HEMA HEMARINAN HEMA HEMARINAN HEMAHANEAN HEMARINAN HEMARINAN HEMALEBAN HEMAHANEAN HEMALEBAN HEMAHANEAN HEMALEBAN HEMAHANEAN HEMALEBAN HEMAL	254 268 278 288 280 286 286 307 309 308 286 286 307 309 268 286 286 286 286 286 286 286 286 286 286 286 286 286 286 286 286 286 286 286 287 287
DAWA DAYTON DAYTRON DAYTRON DAYTRON DE GRAAF DECCA DETIRON DETIRON DENNER DESMET DIAMANT DIAM	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 208 287 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 20	ELITE 080 240 5 410 ELIMAN 308 229 254 286 296 ELMAN 329 210 209 229 239 241 EMERSON 274 283 286 307 374 EMPEROR 274 881 286 307 374 EMPEROR 208 286 307 374 376 ESTELE 410 ETRON 208 224 286 410 ETRON 208 224 286 410 ETRON 208 225 270 286 374 EUROPHON 208 253 270 286 374 EUROPHON 208 266 EXCL 208 283 270 286 374 EUROPHON 208 286 EWRET 410 EXCLI 208 286 EXFEL 208 286 EMPEROR 208 286 FINIANDIA 218 253 270 286 374 EMPEROR 208 286 FINIANDIA 218 253 270 286 374 EMPEROR 208 286 FINIANDIA 218 253 270 286 374 EMPEROR 208 286 FINIANDIA 218 253 270 286 374 EMPEROR 208 286 FINIANDIA 253 371 410 FINIANDIA 253 FINIANDIA 253 FINIANDIA 253 FINIANDIA 253 FINIANDIA 253 FINIANDIA 253 FINIANDIA 318 253 261 286 FINIANDIA 318 253 261 286 FINIANDIA 318 323 336 339 FINIANDIA 318 323 338 383 383 383 383 383 383 383 38	FINR FORMENTI FORMENTI FORMENTI FORMENTI FORMENTI FORTEES FRABA FRIAC FRONTECH FUJITSU FUJITSU FUTURE FUTURE FUTURE FUTURE FUTURE FUTURE GALAXI GALAXI GALAXI GALAXI GALAXI GE GE GE GEANT CASIONO GEC GEOSO GERBA TICHNIC GENEZIA GIANT GIBRALTER GO VIOPO GOLDFUNK	329	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRONIC GRUNDIG GRUNDIG GRUNDIG HAIE HALEAX HALLMAR HALLMAR HANDEATIC HANTAREX HANTOR HANGEATIC HANTAREX HANTOR HANGEATIC HANGEATIC HANGEATIC HEDZON HEMBERBANN HIGHLINE HINARI HISAWA	254 268 280
DAWA DAYTON DAYTRON DAYTRON DECGRAPE DECCA DETIRON DENNICO DENNICO DENNOR DENNICO DENNOR DENNICO DENNOR DENNICO DENNOR DENNICO DENNOR DENNICO DENNICO DIGUITOR DIGUI	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 385 208 224 286 308 397 208 286 286 208 287 208 288 208 287 208 288	ELITE 2008 242 254 286 296 ELMAN 329 ELTA 32	FINR FORMENTI FORMENTI FORMENTI FORMENTI FORMENTI FORTEES FRABA FRIAC FRONTECH FUJITSU FUJITSU FUTURE FUTURE FUTURE FUTURE FUTURE FUTURE GALAXI GALAXI GALAXI GALAXI GALAXI GE GE GE GEANT CASIONO GEC GEOSO GERBA TICHNIC GENEZIA GIANT GIBRALTER GO VIOPO GOLDFUNK	329	GPM GRADIENTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNDIG GRUNDIG GRUNDIG GRUNDIG HALEAX HALLAX HALLAX HALLAX HALLASA HALMARIN HAMPTON HANSEATIC HANTABEX HANTOR HARITABESON HARWAGOON HARWAGOON HARWAGOON HARWAGOON HEMA HEMA HEMARINAN HEMA HEMARINAN HEMAHANEAN HEMARINAN HEMARINAN HEMALEBAN HEMAHANEAN HEMALEBAN HEMAHANEAN HEMALEBAN HEMAHANEAN HEMALEBAN HEMAL	254 248 280 280 280 280 284 286 307 309 308 404 410 208 218 253 286 296 245 286 287
DAWA DAYTON DAYTRON DAYTRON DAYTRON DEGRAPA DECCA DETRON DENKO DENKO DENKO DENKO DENKO DENKO DENKO DENMO DIGATRON DIGAT	208 266 224 208 209 229 286 298 296 410 208 218 253 286 326 384 208 286 385 208 286 387 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 287 400 208 287 400 208 288 208 286 208 288 208 28	ELITE 208 242 254 286 296 ELMAN 329 ELTA 224 270 EMERSON 208 292 297 293 241 257 260 261 262 263 EMERSON 208 292 297 397 410 EMERSON 208 298 397 410 EMPEROR 274 ENVISION 205 ERRES 208 286 ESC. 208 285 286 ESC. 208 285 286 ESTELE 410 ETRON 208 224 286 410 EUROPAC 208 286 EUROPHON 208 253 270 286 374 EUROPAC 208 286 EUROPHON 208 265 270 286 374 EUROPAC 208 286 EUROPHON 208 288 EUROPHON 2	FNR FORMENTI FORMENTI FORMENTHEORIK FORTRESS FRABA FRIAC FRONTECH FUJITSU FUJITSU FUJITSU FUTURE FUTURETECH [G] GALAXI GALAXIS GALERIA GBC GE GEANT CASIONO GEC GELOSO GENERALTICINE GENESIS GENEXXA GIANT GIBRALTER GO VIDEO GOLDEUNK GOLDSTAR	329 268 293 308 376 396 397 410 396 397 410 396 397 410 396 397 410 396 397 410 397	GPM GRADINTE GRADIN GRAETZ GRANADA GRANDIN GRONIC GRUNDIG GRUNDIG GRUNDIG GRUNDIG GRUNDIG GRUNDIG HAIEAX HALEAX HALEAX HALEAX HALEAX HALMARTON HANSATION HANNATON HAN	254 268 278 288 280 286
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	309 313	314 315	316		389	410			KMC KNEISSEL		286	312	374	408	LUX MAY		224	286	
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INGELEN	244 307	387 410		KARCHER	208	270 27	4 286	5 329		286	307	344		385	INIAI 3UI	253	286	296	30
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INTERFUNK	208 244	286 287 368 374	305	KINGSLEY	252	229 35	19		LOGIK LOGIX	208 400	220	226	286	401	MEMOREX	383	398	399	40
		410	3//	KITON	208	286			LUMA	208	224	286	309	312	MEMOREX	234	237	239	26
INTERNAL	208 286			KLH	325					408	410				1	279	296		
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	218 224			NESCO	261	200			OTTO VERSAND	207	208	224	253		POLICOM	258	307	329	39
MERCURY	208 224	286	400	NETSAT	208		4 286	5 387	OTTO VERSAND	274 298	285	286 307	287 308	269 292 309	POLICOM	258 410 270	307	329	39
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MERCURY METZ MGA MICROMAXX	208 224 208 286 205 208 260 286 208 286 206 209	286 346 397 229 233	237	NETSAT NEWFUNK NEW TECH NIKKAI	208 208 208 206 252 325	224 25 224 25 208 21 253 25 394	3 286 8 224 4 270	5 4 242 0 286	[P]	274 298 310 405	285 303 311 409	286 307	287 308	292	POLYRON POPPY	410 270 224	219	229	
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MERCURY METZ MGA MICROMAXX MIDLAND MINATO	208 224 208 286 205 208 260 286 208 286 206 209 235 208 286	286 346 397 229 233 398 346 400 210 211	237	NETSAT NEWFUNK NEW TECH NIKKAI	208 208 208 206 252 325 205	224 25 224 25 208 21 253 25 394	3 286 8 224 4 270 9 223	5 4 242 0 286	[P] PACIFIC	274 298 310 405 208 379	285 303 311 409 286	286 307 362	287 308 380	292 309 384	POLYRON POPPY PORTLAND PRANDONI PRINCE PRECISION PREMIER PRIMA	410 270 224 209 307 253 224 224	219 309 242	229 379 270	38
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA	208 224 208 286 205 208 260 286 208 286 206 209 235 208 286 258 384	286 346 397 229 233 398 346 400	237	NETSAT NEWFUNK NEW TECH NIKKAI NIKKO NISATO NOBLEX	208 208 208 206 252 325 205 239 289 281	224 25 224 25 208 21 253 25 394 210 21 242 26	3 286 8 224 64 270 9 223	5 4 242 0 286 7 229	[P] PACIFIC PAEL PALLADIUM	274 298 310 405 208 379 208 323	285 303 311 409 286 253 374	286 307 362 286 397	287 308 380 380 309 405	292 309 384 312 410	POLYRON POPPY PORTLAND PRANDON PRINCE PRECISION PREMIER PRIMA PRINZ	410 270 224 209 307 253 224 224 218	219 309 242	229 379	38
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINOKA MINUTZ	208 224 208 286 205 208 260 286 208 286 206 209 235 208 286 258 384 208 286 201	286 346 397 229 233 398 346 400 210 211 395 396 331 407	237	NETSAT NEWFUNK NEW TECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO	208 208 208 206 252 325 205 239 289 281 329	224 25 224 25 208 21 2253 25 394 210 21 2242 26	3 286 8 224 4 270 9 223 60	5 4 242 0 286 7 229	[P] PACIFIC PAEL PALLADIUM PALSONIC	274 298 310 405 208 379 208 323 208 401	285 303 311 409 286 253 374 253 434	286 307 362 286 397 270 435	287 308 380 380 309 405 286	292 309 384 312 410 331	POLYRON POPPY PORTLAND PRANDON PRINCE PRECISION PREMIER PRIMA PRINZ PRISM	410 270 224 209 307 253 224 224 218 211	219 309 242 307	229 379 270 325	38 29 40
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINOKA MINUTZ	208 224 208 286 205 208 260 286 208 286 206 209 235 208 286 258 384 208 286 201 207 208	286 346 397 229 233 398 346 400 210 211 395 396 331 407	237 227 233	NETSAT NEWFUNK NEW TECH NIKKAI NIKKO NISATO NOBLEX	208 208 208 206 252 325 205 239 289 281 329 261 305	224 27 224 25 208 21 253 25 394 210 21 2242 26 3379 39 2270 29 336 30	3 286 8 224 4 270 9 227 10 95 396 10 298 17 309	5 4 242 0 286 7 229 5 8 304 9 353	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA	274 298 310 405 208 379 208 323 208 401 208	285 303 311 409 286 253 374 253 434 224	286 307 362 286 397 270 435 253	287 308 380 309 405 286 270	292 309 384 312 410 331 286	POLYRON POPPY PORTLAND PRANDON PRINCE PRECISION PREMIER PRIMA PRINZ	410 270 224 209 307 253 224 224 218 211	219 309 242 307	229 379 270	38 29 40
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINOKA MINUTZ MITSUBISHI	208 224 208 286 205 208 260 286 206 209 235 208 286 258 384 208 286 201 207 208 237 258 296 397	286 346 397 229 233 398 346 400 210 211 395 396 331 407	237 227 233	NETSAT NEWFUNK NEW TECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO	208 208 208 206 252 325 205 239 289 281 329 261 305 373	224 25 224 25 208 21 253 25 394 210 21 2242 26 3379 39 2270 29 306 30 3381 38	3 286 8 224 4 270 9 223 60 25 65 396 66 298 67 309 62 383	5 4 242 0 286 7 229 5 8 304 9 353 3 385	[P] PACIFIC PAEL PALLADIUM PALSONIC	274 298 310 405 208 379 208 323 208 401 208 208	285 303 311 409 286 253 374 253 434 224 210	286 307 362 286 397 270 435 253 211	287 308 380 380 309 405 286 270 212	292 309 384 312 410 331 286 213	POLYRON POPPY PORTLAND PRANDON PRINCE PRECISION PREMIER PRIMA PRINZ PRISM PROFEX PROFI PROFITRONIC	410 270 224 209 307 253 224 218 211 224 224 224 208	219 309 242 307 307 286	229 379 270 325 396 329	38 29 40 41
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINOKA MINUTZ MITSUBISHI MITSURIGENERAL	208 224 208 286 205 208 260 286 208 286 206 209 235 208 286 258 384 208 286 201 207 208 237 258 296 397 410	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286	237 227 233 287	NETSAT NEWFUNK NEW TECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO	208 208 208 206 252 325 205 239 289 281 329 261 305 373	224 27 224 25 208 21 253 25 394 210 21 2242 26 3379 39 2270 29 336 30	3 286 8 224 4 270 9 223 60 25 65 396 66 298 67 309 62 383	5 4 242 0 286 7 229 5 8 304 9 353 3 385	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA	274 298 310 405 208 379 208 323 208 401 208 208 214 237	285 303 311 409 286 253 374 253 434 224 210 216 239	286 307 362 286 397 270 435 253 211 220 242	287 308 380 380 309 405 286 270 212 230 244	292 309 384 312 410 331 286 213 236 245	POLYRON POPPY PORTLAND PRANDON FRIKE PRECISION PREMIER PRIMA PRINZ PRISM PROFEX PROFI PROFITRONIC	410 270 224 209 307 253 224 218 211 224 224 208 208	219 309 242 307 307 286 218	229 379 270 325 396	38 29 40 41
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINOKA MINUTZ MITSUBISHI MITSURIGENERAL	208 224 208 286 205 208 260 286 208 286 206 209 235 208 286 258 384 208 286 201 207 208 237 258 296 397 410	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286	237 227 233 287	NETSAT NEWFUNK NEWTECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO NOKIA	208 208 208 206 252 325 205 239 289 281 329 261 305 373 386 253 208	224 25 224 25 208 21 253 25 394 210 21 2242 26 3379 39 2270 29 306 30 3381 38	3 286 8 224 64 270 9 223 60 298 65 396 66 298 67 309 62 383 65 403	5 4 242 0 286 7 229 5 8 304 9 353 3 385 7 410	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA	274 298 310 405 208 379 208 323 208 401 208 214 237 255	285 303 311 409 286 253 374 253 434 224 210 216 239	286 307 362 286 397 270 435 253 211 220 242 260	287 308 380 380 309 405 286 270 212 230 244 278	292 309 384 312 410 331 286 213 236	POLYRON POPPY PORTLAND PRINCOMPRINCE PRECISION PREMIER PRIMA PRINZ PRISM PROFEX PROFII PROFITRONIC PROLINE PROSCAN	410 270 224 209 307 253 224 218 211 224 224 208 208 205	219 309 242 307 307 286 218 210	229 379 270 325 396 329 286	38 29 40 41
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINATO MINERVA MINOKA MINUTZ MITSUBISHI MITSUBIGENERAL MIVAR MONACO	208 224 208 286 205 208 260 286 208 286 208 209 235 208 286 208 286 201 201 201 201 202 203 204 205 205 206 207 208 207 208 209 209 209 209 209 210 210 220 230 240 250 250 250 250 250 250 250 250 250 25	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286	237 227 233 287	NETSAT NEWFUNK NEWTECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO NOKIA	208 208 208 206 252 325 205 239 289 281 329 261 305 373 386 253 208 410	224 27 224 25 208 21 253 25 394 210 21 242 26 379 39 270 29 3381 38 404 40 286 38	3 286 8 224 64 270 9 223 60 298 65 396 66 298 67 309 62 383 65 403	5 4 242 0 286 7 229 5 8 304 9 353 3 385 7 410	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA	274 298 310 405 208 379 208 323 208 401 208 214 237 255 286	285 303 311 409 286 253 374 253 434 224 210 216 239 258	286 307 362 286 397 270 435 253 211 220 242 260 309	287 308 380 380 309 405 286 270 212 230 244 278	292 309 384 312 410 331 286 213 236 245 279	POLYRON POPPY PORTLAND PRANDON FRIKE PRECISION PREMIER PRIMA PRINZ PRISM PROFEX PROFI PROFITRONIC	410 270 224 209 307 253 224 218 211 224 224 208 208 205	219 309 242 307 307 286 218 210 286	229 379 270 325 396 329	38 29 40 41
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINUTZ MITSUBISHI MITSUBIGENERAL MIVAR MONACO MONGAN'S	208 224 208 286 205 208 206 286 208 286 208 286 258 384 208 286 201 201 207 208 237 258 296 397 410 252 253 396 412 204 228	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286	237 227 233 287	NETSAT NEWFUNK NEWTECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO NOKIA	208 208 208 206 252 325 205 239 289 281 329 261 305 373 386 253 208 410	224 25 224 25 208 21 253 25 394 210 21 242 26 379 39 270 29 306 30 381 38 404 40	3 286 8 224 64 270 9 223 60 298 65 396 66 298 67 309 62 383 65 403	5 4 242 0 286 7 229 5 8 304 9 353 3 385 7 410	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC	274 298 310 405 208 379 208 323 208 401 208 214 237 255 286 208 252	285 303 311 409 286 253 374 253 434 210 216 239 258 307 286	286 307 362 286 397 270 435 253 211 220 242 260 309	287 308 380 309 405 286 270 212 230 244 278 384	292 309 384 312 410 331 286 213 236 245 279 410	POLYRON POPPY PORTLAND PRANDOM PRINCE PRECISION PREMIER PRIMA PRINZ PRISM PROFEX PROFII PROFITRONIC PROLINE PROSCAN PROSONIC	410 270 224 209 307 253 224 218 211 224 208 208 205 208 309 208	219 309 242 307 307 286 218 210 286 329 224	229 379 270 325 396 329 286 374	38 40 41 31 38
MERCURY METZ MGA MIGROMAXX MIDLAND MINATO MINERVA MINUTZ MITSUBISHI MITSUBISHERAL MIVAR MINATO MORGAN'S MOTION	208 224 208 286 205 208 206 286 208 286 207 208 286 201 208 208 286 201 208 207 208 237 258 296 397 410 224 224 224 208 286 396	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286	237 227 233 287	NETSAT NEWFUNK NEWTECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO NOKIA NORDIC NORDIC NORDEOLK NORMEREL	208 208 208 206 252 325 205 239 289 281 329 261 305 373 386 253 208 410 208 228 208	224 27 224 25 208 21 253 25 394 210 21 242 26 379 39 270 29 3381 38 404 40 286 38	3 286 8 224 4 270 9 225 60 95 396 96 298 97 309 12 383 95 400	5 4 242 0 286 7 229 5 8 304 9 353 3 385 7 410	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAVISION	274 298 310 405 208 379 208 323 208 401 208 214 237 255 286 208	285 303 311 409 286 253 374 253 434 210 216 239 258 307 286	286 307 362 286 397 270 435 253 211 220 242 260 309 312	287 308 380 309 405 286 270 212 230 244 278 384	292 309 384 312 410 331 286 213 236 245 279 410	POLYRON POPPY PORTLAND PRANDON/PRICE PRECISION PREMIER PRIMA PRINZ PRISM PROFEX PROFI PROFITONIC PROLINE PROSCAN PROSONIC	410 270 224 209 307 253 224 218 211 224 208 208 205 208 309 208	219 309 242 307 307 286 218 210 286 329 224	229 379 270 325 396 329 286 374	38 40 41 31 38
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINOKA MINUTZ MITSUBISHI MITSUBISHEBAL MIVAR MONACO MORGAN'S MOTION MOTOROLA	208 224 208 286 205 208 206 286 207 208 286 208 286 208 286 201 207 208 208 20	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286 370 374 413	237 227 233 287 384	NETSAT NEWFUNK NEWTECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO NOKIA NORDIC NORDMENDE NORFOLK NORMEREL NOSHI NOVATRONIC NTC	208 208 208 208 206 252 325 205 239 281 305 373 386 253 208 410 208 228 208 219	224 27 224 25 208 21 253 25 394 210 21 242 26 3379 39 270 29 3381 38 3404 40 286 38 286	3 286 8 224 4 270 9 225 60 95 396 96 298 97 309 12 383 95 400	5 4 242 0 286 7 229 5 8 304 9 353 3 385 7 410	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAVISION PATHE CIMEMA PAUSA PCEPPEC	274 298 310 405 208 379 208 323 208 401 208 214 237 255 286 208 241 242 242	285 303 311 409 286 253 374 253 434 4210 216 239 258 307 286 308 296	286 307 362 286 397 270 435 253 211 220 242 2260 309 312 374	287 308 380 309 405 286 270 212 230 244 278 384 405	292 309 384 312 410 331 286 213 236 245 279 410	POLYRON POPPY PORTLAND PRANDON/PRICE PRECISION PREMIER PRIMA PRINZ PRISM PROFEX PROFI PROFITONIC PROLINE PROSCAN PROSONIC	410 270 224 209 307 253 224 218 211 224 208 208 208 205 208 309 208 286	219 309 242 307 307 286 218 210 286 329 224 323	229 379 270 325 396 329 286 374 253 376	38 40 41 31 38
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINOKA MINUTZ MITSUBISHI MITSUBISHEBAL MIVAR MONACO MORGAN'S MOTION MOTOROLA	208 224 208 286 205 208 260 286 208 286 208 286 208 286 207 208 237 258 296 397 410 252 253 396 412 224 208 286 217 208 286 209 297 410 252 253 396 412 224 208 286 217 208 286 216 217 226 215 226 215 226 226 226 226 226 226 226 226 226 22	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286 370 374 413	237 227 233 287 384	NETSAT NEWFUNK NEWTECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO NORDIC NORDMENDE NORPOLK NORMEREL NOSHI NOVATRONIC	208 208 208 208 206 252 325 205 239 281 305 373 386 253 208 410 208 228 208 219	224 25 224 25 208 21 253 25 394 210 21 242 26 379 39 270 25 306 30 381 38 404 40 286 38	3 286 8 224 4 270 9 225 60 95 396 96 298 97 309 12 383 95 400	5 4 242 0 286 7 229 5 8 304 9 353 3 385 7 410	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAMISION PATHE CINEMA PAUSA	274 298 310 405 208 379 208 323 208 401 208 214 237 255 266 208 252 413 224 242 242	285 303 311 409 286 253 374 253 434 210 216 229 258 307 286 308	286 307 362 286 397 270 435 253 221 220 242 260 309 312 374 298 205	287 308 380 309 405 286 270 212 230 244 278 384 405	292 309 384 312 410 331 286 213 236 245 279 410	POLYRON POPPY PORTLAND PANDOM PRINCE PRECISION PREMIER PRIMA PRINZ PRISM PROFEX PROFI PROFITRONIC PROLINE PROSCAN PROSCAN PROSCAN PROSCH PROTEC PROTECH	410 270 224 209 307 224 218 211 224 224 208 208 208 309 208 410 222 208	219 309 242 307 307 286 218 210 286 329 224 323 229 286	229 379 270 325 396 329 286 374 253 376 260 346	38 29 40 41 31 38 20 40
MERCURY METZ MGA MICROMAXX MIDLAND MINETO MINETVA MINOKA MINUTZ MITSUBISHI MI	208 224 208 286 205 208 206 286 207 208 286 208 286 208 286 201 207 208 208 20	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286 370 374 413	237 227 233 287 384	NETSAT NEWFUNK NEWTECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO NOKIA NORDIC NORDMENDE NORFOLK NORMEREL NOSHI NOVATRONIC NTC	208 208 208 208 206 252 325 205 239 281 305 373 386 253 208 410 208 228 208 219	224 27 224 25 208 21 253 25 394 210 21 242 26 3379 39 270 29 3381 38 3404 40 286 38 286	3 286 8 224 4 270 9 225 60 95 396 96 298 97 309 12 383 95 400	5 4 242 0 286 7 229 5 8 304 9 353 3 385 7 410	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAVISION PATHE CIMEMA PAUSA PCEPPEC	274 298 310 405 208 323 208 214 401 208 214 237 255 286 208 212 413 224 242 201 210 202 202	285 303 311 409 286 253 374 253 434 210 216 229 258 307 286 308	286 307 362 286 397 270 435 253 211 2220 242 260 309 312 374 298 205 215	287 308 380 309 405 286 270 212 230 244 278 384 405	292 309 384 312 410 331 286 213 236 245 279 410 410	POLYRON POPPY PORTLAND PREMER PRECISION PREMIER PRIMA PRIMA PRINZ PRISM PROFIE PROFITCONIC PROCE PROTEC PRO	410 270 224 209 307 224 218 211 224 224 208 208 208 309 208 410 222 208 227	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229	229 379 270 325 396 329 286 374 253 376 260 346 313	38 29 40 41 31 38 27 40
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINATO MINERVA MINOKA MINUTZ MITSUBISHI MISUBISHI MISUBISHI MONACO MORGAN'S MOTION MOTOROLA MITC MILITISTANDARD MULTITEC	208 224 208 286 205 208 260 286 208 286 208 286 208 286 208 286 201 207 208 237 258 296 397 410 252 253 396 412 204 286 206 287 205 286 206 287 207 208 208 286	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286 370 374 346 376 376	237 227 233 287 384 252 405	NETSAT NEWFUNK NEWTECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO NOKIA NORDIC NORDIC NORDMENDE NORPOLK NOMMEREL NOSHII NOVATRONIC NTC NURNBERG	208 208 208 206 252 325 205 239 281 329 261 305 373 386 223 410 208 228 228 229 241 208 229 241 244	2224 25 2224 25 2224 25 2324 25 23394 21 210 21 210 21 220 26 230 20 230 20 240 20	3 286 8 224 4 270 9 223 9 223	5 4 242 2 0 286 6 7 229 6 5 8 3 304 9 353 3 385 7 410 0 0	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAVISION PATHE CINEMA PAUSA PCEPPEC PENNY	274 298 310 405 208 379 208 401 208 214 237 255 286 208 252 413 224 241 242 242 260	285 303 311 409 286 253 374 253 224 210 216 239 258 307 286 308 296 203 211 228	286 307 362 286 397 270 435 253 211 220 242 260 312 374 298 205 215 229	287 308 380 309 405 286 270 212 230 244 278 384 405	292 309 384 312 410 331 286 213 236 245 279 410 410	POLYNON POPPY PORTLAND PANDON PRICE PRECISION PREMIER PRIMA PRIMA PRINZ PRISM PROFEX PROOFIT PROOFITCON PROSONIC PROTTEC PROTT	410 270 224 209 253 224 224 218 208 208 208 205 208 208 206 410 222 208 227 208	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229	229 379 270 325 396 329 286 374 253 376 260 346 313	38 29 40 41 31 38 27 40
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINATO MINERVA MINOKA MINUTZ MITSUBISHI MISUBISHI MISUBISHI MONACO MORGAN'S MOTION MOTOROLA MITC MILITISTANDARD MULTITEC	208 224 208 286 205 208 208 286 209 228 208 286 201 288 207 208 237 258 296 397 410 252 253 396 412 204 28 214 230 215 262 214 230 215 262 214 230 215 262 217 208 228 286 239 286 240 298 240 298 240 298 240 282	286 346 397 223 398 346 376 229 230 286 374 374 413 374 374 374 376 252 253 275 252 253 376 376 376 376 376 376 376 376 376 37	237 227 233 287 384 252 405	NETSAT NEWFUKK NEWTECH NICKAI NIKKO NISATO NOBLEX NOBLEK NOBLIKO NORDIC NORDIC NORDMENDE NORPOLIK NORMEREL NOSHI NOWATRONLO TIC TO OCEANIC	208 208 208 206 252 325 205 239 281 305 329 261 305 208 228 208 228 208 228 208 228 237 244 377	2224 25 2224 25 2224 25 23394 210 21 210 21 2242 26 3379 35 3379 35 3404 40 404 40 405 36 366 36 367 36 368 36 3	3 286 8 224 4 270 9 223 9 223	5 4 242 2 0 286 6 7 229 6 5 8 3 304 9 353 3 385 7 410 0 0	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAVISION PATHE CINEMA PAUS PECPPEC PENNY PERDIO	274 298 310 405 208 379 208 401 208 214 237 255 286 208 252 413 224 241 242 242 260	285 303 311 409 286 253 374 253 434 210 216 239 224 218 296 203 211 228	286 307 362 286 397 270 435 253 211 220 242 260 312 374 298 205 215 229	287 308 380 309 405 286 270 212 230 244 278 384 405	292 309 384 312 410 331 286 213 236 245 279 410 410	POLYRON POPPY PORTLAND PRANCONINIVE PRANCONINIVE PRECISION PRECESION PRECESION PRECESION PREMIER PRISM PROFE PROFI PROFIT PROFIT PROSONIC PROTEC PROTEC PROTEC PROTEC PROTON PRO-VISION PULSAR PYE PYMI	410 270 224 209 307 224 218 211 224 224 208 208 208 309 208 410 222 208 227	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229	229 379 270 325 396 329 286 374 253 376 260 346 313	38 29 40 41 31 38 27 40
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINOKA MINOKA MINUTZ MITSUBISHI WISUBIGENERAL MIVAR MONACO MORGAN'S MOTION MOTOROLA MITC MILITITECH MULTITECH	208 224	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286 370 374 346 376 376 374 346 376 379 329 329 329 329 329	237 227 233 287 384 252 405	NETSAT NEWFUNK NEWTECH NIKKO NIKKO NISATO NOBLEK NOBLIKO NORDIC NORDIC NORDIC NORPOIK NOWATRONIC NICO	208 208 208 206 252 325 239 281 329 261 305 253 386 219 307 208 219 307	2224 25 2224 25 2224 25 2324 25 23394 21 210 21 210 21 220 26 230 20 230 20 240 20	33 2868 2244 270 9 227 9 227 9 227 9 227 9 227 9 227 9 227 9 227 9 240 9 240	5 4 242 2 2 29 2 286 7 229 5 8 3 304 9 353 7 410 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAVISION PATHE CINEMA PAUS PECPPEC PERNY PERDIO PERFERT PHASE	274 298 310 405 208 379 208 401 208 214 237 255 286 208 252 241 210 210 222 260 208 208 252 262 208 208 252 266 208 208 208 208 208 208 208 208 208 208	285 303 311 409 286 253 374 224 210 216 239 258 307 286 203 221 228 218 228	286 307 362 286 397 270 435 253 221 220 242 260 309 312 374 298 205 215 229	287 308 380 309 405 286 270 212 230 244 278 384 405 206 216 235 286	292 3309 384 312 410 331 286 213 226 245 249 410 410	POLYNON POPPY PORTLAND PRANCOMPRICE PRECISION PREMER PRISM PROFEX PROFITRONIC PROLINE PROSCAN PROSCONIC PROTECH PROTON PROTECH PROTON PROVISION PULSAR PYE PYM [Q]	410 270 224 209 307 253 224 218 211 224 228 208 205 208 309 208 410 222 208 208 205 208 208 205 208 208 205 208 208 205 208 209 209 209 209 209 209 209 209 209 209	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229 286	229 379 270 325 396 329 286 374 253 376 260 346 313 331	38 40 41 31 38 27 40
MERCLUPY METZ MIGA MICROMAXX MIDLAND MINATO MINERVA MINOTA MINOTA MITSUBIGERERAL MULTITECH MULTI	208 224 208 286 205 208 208 286 209 286 207 288 207 208 237 258 296 397 410 224 224 224 230 252 241 240 252 252 253 266 267 268 267 268 268 270 288 286 287 298 286 298 286 298 286 298 286 298 286 298 286 298 286 376 396 298 286 376 396 298 288 376 396 298 288 376 396 396 396 396 396 398	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286 370 374 346 376 376 374 346 376 379 329 329 329 329 329	237 227 233 287 384 252 405	NETSAT NEWTUKK NEW TECH NIKKO NIKKO NIKKO NIKKO NOBLEX NOBLEX NOBLEX NOBDLEX NOBDLEX NOBDATON NOBLEX NOBDATON NOBLEX NOBDATON NOBLEX NOBBATON NOBLEX	208 208 208 206 252 25 239 289 261 305 373 36 208 410 208 219 307 208 219 307 208 219 209 219 219 229 244 277 270 270 270 270 270 270 270 270 270	2224 25 2224 25 2224 25 223 25 225 25 225 25 227 26 227 26 2286 36 2286 36 286	33 2868 2244 270 9 227 9 227 9 227 9 227 9 227 9 227 9 227 9 227 9 240 9 240	5 4 242 2 2 29 2 286 7 229 5 8 3 304 9 353 7 410 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAVISION PATHE CIMENA PAUSA PCE/PEC PENNY PERDIO PERFERT	274 298 310 405 208 379 208 208 201 208 214 237 255 286 208 241 242 242 241 210 222 260 208 208 208 208 208 208 208 208 208 20	285 303 311 409 286 253 374 253 434 210 224 210 239 258 308 296 203 211 228 218 228 218 228	286 307 362 286 397 270 4435 253 211 220 309 312 374 298 205 215 229 274	287 308 380 309 405 286 270 212 230 244 278 384 405 206 216 235 286	292 3309 384 312 410 331 286 213 236 245 279 410 410	POLYNON POPPY PORTLAND PRANCONINICE PROSTRIAND PRECESION PRECESION PRECESION PRECESION PRECESION PROCES PROJE PROJE PROJEC PROTEC PROTEC PROTEC PROTEC PROTEC PROTON PRO-VISION PULSAR PYE PYMI [C] QUASAR	410 270 224 209 307 253 224 224 224 224 208 205 208 309 208 410 222 228 227 208 227 208 227 228	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229 286	229 379 270 325 396 329 286 374 253 376 260 346 313 331	38 40 41 31 38 27 40
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINATO MINUTZ MITSUBISHI WISUBISHI WISUBISHI MINUTZ MITSUBISHI MINUTZ MITSUBISHI MINUTZ MITSUBISHI MINUTZ MITSUBISHI MINUTZ MITSUBISHI MINUTZ MITSUBISHI MINUTZ MIN	208 224	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286 370 374 346 376 376 374 346 376 379 329 329 329 329 329	237 227 233 287 384 252 405	NETSAT NEWTUKK NEWTECH NIKKAI NIKKO NIKKO NIKKO NOBLIKO NOBLIKO NOBLIKO NORDIK NORDIK NORPOIK NORPOIK NORMEEL NORMEEL NORMEEL NOWTRONIC NURNBERG [O] OCEANIC ODEON	208 208 208 206 252 325 239 281 329 261 305 253 386 219 307 208 219 307	224 25 224 25 225 26 225 26 225 27 226 27 227 26 227 26 227 26 227 26 227 26 227 26 228 38 228 38	33 2868 2244 270 9 227 9 227 9 227 9 227 9 227 9 227 9 227 9 227 9 240 9 240	5 4 242 2 2 29 2 29 5 5 8 304 9 353 7 410 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAVISION PATHE CINEMA PAUS PECPPEC PERNY PERDIO PERFERT PHASE	274 298 310 405 405 405 405 405 405 405 405 405 40	285 303 311 409 286 253 374 253 434 224 210 216 239 258 307 286 308 296 203 211 228 218 228 229 229 286	286 307 362 286 397 270 435 253 211 220 242 2242 2260 309 312 274 298 205 215 229 274	287 308 380 309 405 286 270 212 230 244 405 216 235 286 206 216 235 286	292 3309 384 312 410 331 286 213 236 245 279 410 410	POLYNON POPPY PORTLAND PRANCOMPRICE PRECISION PREMER PRISM PROFEX PROFITRONIC PROLINE PROSCAN PROSCONIC PROTECH PROTON PROTECH PROTON PROVISION PULSAR PYE PYM [Q]	410 270 224 224 228 224 218 211 224 224 224 208 208 309 208 410 222 208 410 222 208 211 222 208 211 224 224 224 224 224 224 224 224 224	219 309 242 307 307 286 218 210 224 323 229 286 229 286	229 379 270 325 396 374 253 376 260 346 313 331	38 29 40 41 31 38 27 40 32 39
MERCLIRY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINOTA MINOTA MINOTI MITSUBIGENERAL MITSUBIGE	208 224 208 286 205 208 208 286 209 286 207 288 207 208 237 258 296 397 410 224 224 224 230 252 241 240 252 252 253 266 267 268 267 268 268 270 288 286 287 298 286 298 286 298 286 298 286 298 286 298 286 298 286 376 396 298 286 376 396 298 288 376 396 298 288 376 396 396 396 396 396 398	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286 370 374 346 376 376 374 346 376 379 329 329 329 329 329	237 227 233 287 384 252 405	NETSAT NEWFUKK NEWTECH NIGKAI NIKKO NISATO NOBLEX NOBLIKO NOBLIKO NOBLIKO NOBDIC NOBDMENDE NOBPOLK NOBDMENDE NOBPOLK NOBMENDE NOBFOLK NOBMENDE NOBM	208 208 208 206 252 205 229 281 305 373 386 253 208 219 307 208 219 307 228 228 228 228 228 228 237 244 377 270 208 247 270 270 270 270 270 270 270 270 270 27	2224 22 2224 22 2228 22 2253 22 2394 22 242 26 242 26 242 26 243 36 365 33 381 33 381 34 404 40 246 36 246 36 247 25 248 25 248 26 35 248 26 36 37 38 38 38 38 38 38 38 38 38 38 38 38 38 3	33 286 8 22-44 270 9 22-3 9 22-3 9 22-3 9 22-3 15 396 17 305 17 410 19 305 17 305 17 410 18 410 19 410 19 410	5 4 242 2 2 2 9 6 7 229 6 5 8 3 304 8 3 305 3 3 3 385 7 410 0 0 9 311 0 0 286	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAMISION PATHE CIMENA PAUSA PCEPPEC PENNY PERDIO PERFEKT PHASE PHILCO	274 298 310 405 208 323 208 214 224 221 260 208 208 208 208 208 208 208 208 208 20	285 303 311 409 286 253 374 253 434 224 210 216 239 258 307 286 308 296 203 211 228 218 228	286 307 362 286 397 270 435 253 211 220 242 2242 2260 309 312 274 298 205 215 229 274	287 308 380 309 405 286 270 212 230 244 405 216 235 286 206 216 235 286	292 3309 384 312 410 331 286 213 236 245 279 410 410 209 221 242 410	POLYNON POPPY PORTLAND PRANCONINICE PROSTRIAND PRECESION PRECESION PRECESION PRECESION PRECESION PROCES PROJE PROJE PROJEC PROTEC PROTEC PROTEC PROTEC PROTEC PROTON PRO-VISION PULSAR PYE PYMI [C] QUASAR	410 270 224 209 307 253 224 218 211 224 208 208 205 208 208 227 208 228 229 208 229 208 221 222 222 208 224 224 224 224 224 224 224 224 224 22	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229 286	229 379 270 325 396 329 286 374 253 376 260 346 313 331 224 225 287 310	38 40 41 31 38 27 40 32 39 24 29 31
MERCURY METZ MIGA MICROMAXX MICROMAXX MINDLAND MINATO MINERVA MINOTA MINOTA MINUTA MINUTA MITSUBISHI MITSUBISH	208 224 208 286 206 208 208 286 208 286 208 286 208 286 208 286 208 286 201 201 207 208 237 258 296 397 410 252 253 396 412 224 268 286 396 286 397 410 288 208 286 309 286 329 288 328 328 288 288 288 288 288 288 288	286 346 397 229 233 398 346 400 210 211 395 396 331 407 229 230 260 286 370 374 346 376 376 374 346 376 379 329 329 329 329 329	237 227 233 287 384 252 405	NETSAT NEWTUKEN NEWTECH NIKKO NIKKO NIKKO NIKKO NOBLEX NOBELEX	208 208 208 206 252 205 232 289 281 329 261 3386 208 410 208 228 228 228 228 229 244 377 270 208 374 270 208 272 270 270 270 270 270 270 270 270 270	224 22 224 22 228 21 228 21 229 22 242 26 253 25 253 25 254 25 264 26 274 26 275 26 276 276 26 276 26 277 26 27	33 286 8 22-44 270 9 22-3 9 22-3 9 22-3 9 22-3 15 396 17 305 17 410 19 305 17 305 17 410 18 410 19 410 19 410	5 4 242 2 2 2 9 6 7 229 6 5 8 3 304 8 3 305 3 3 3 385 7 410 0 0 9 311 0 0 286	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAVISION PATHE CINEMA PAUS PECPPEC PERNY PERDIO PERFERT PHASE	274 298 310 405 405 405 405 405 405 405 405 405 40	285 303 311 409 286 253 374 253 434 224 210 216 239 258 307 286 308 296 203 211 228 218 228 229 229 286	286 307 362 286 397 270 435 253 211 220 242 2242 2260 309 312 274 298 205 215 229 274	287 308 380 309 405 286 270 212 230 244 405 216 235 286 206 216 235 286	292 309 384 312 410 331 286 213 236 245 279 410 410 209 221 242 410	POLYNON POPPY PORTLAND PRANCONINICE PROSTRIAND PRECESION PRECESION PRECESION PRECESION PRECESION PROCES PROJE PROJE PROJEC PROTEC PROTEC PROTEC PROTEC PROTEC PROTON PRO-VISION PULSAR PYE PYMI [C] QUASAR	410 270 224 209 307 253 224 224 224 224 208 205 208 286 410 222 208 227 228 227 228 229 208 211 222 208 211 222 208 208 208 211 222 208 208 208 208 208 208 208 208 208	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229 286 309 368 379	229 379 270 325 396 329 286 374 253 376 260 346 313 331	38 29 40 41 31 38 27 40 32 39 24 29 29 31 37
MERCURY METZ MGA MICROMAXX MICROMAXX MICROMAXX MINOTO MINERVA MINOTO MINISTRA MINUTZ MITSUBIGEBEBB MONACO MORGAN'S MOTION MOTION MOTION MULTIFEC MULTITEC MULT MULTITEC MULT MULTITEC MULTITEC MULTITEC MULTITEC MULT MULT MULT MULT MULT MULT MULT MULT	208 224 208 286 205 208 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 208 286 207 208 208 286 208 286 208 286 208 286 208 286 329 208 286 332 208 286	286 346 347 348 348 348 348 348 348 348 348 348 348	237 227 233 287 384 252 405 400 262 374	NETSAT NEWFUKK NEWTECH NIKKO NIKKO NIKKO NISATO NOBLIKO NOBLIKO NOBLIKO NOBLIKO NOBROIK NOBPOIK NOBROIK NORMEREI NOVATRONIC NTC NURNBERG [O] OCEANIC ODEON OKANO OMEGA OWWA OPERA OPTIMUS ORBIT	208 208 206 252 205 261 305 261 305 261 307 270 208 217 270 208 230 262 208 230 262 208 230 208 230 208 230 208 230 208 230 208 208 230 208 208 208 208 208 230 208 208 208 208 208 208 208 208 208 20	2224 2: 2224 2	3 286 8 22-44 270 9 22: 15 396 16 298 17 309 17 309 17 410 17 410 17 410 18 270 18 270	5 4 242 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAMISION PATHE CINEMA PAUSS PAUSE PAUSE PHICO PHIEST PHIASE PHILEX	274 298 310 405 208 329 208 401 208 214 237 255 286 208 201 224 242 201 210 202 208 208 208 214 323 224 413 224 201 212 226 208 208 208 208 208 208 208 208 208 208	285 303 311 409 286 253 374 253 24 210 229 258 307 286 308 296 203 211 228 218 228 229 229 230 240 251 251 251 251 251 251 251 251 251 251	286 307 362 286 397 270 435 253 211 220 242 260 309 312 374 298 205 215 229 274 204 236 410	287 308 380 309 405 286 270 212 230 244 278 384 405 206 216 235 286 205 267 362	292 3384 3312 410 3311 286 410 2113 286 2113 410 410 410 209 221 410 410 208 828 828 8374	POLYNON POPPY PORTLAND PRANCOMPRICE PRECISION PRECESION PRECESION PRECESION PRECESION PROFILE PROFILE PROFILE PROFILE PROFILE PROFICE PROTECH PROTON PROFILE PROTON PROFILE PROTON PROFILE PROTECH PROTON PROFILE POLISAR PYE PYMI [Q] QUASAR QUELLE	410 270 224 209 307 253 324 224 224 224 228 208 208 208 208 222 208 227 208 227 208 227 208 227 208 227 208 227 309 227 309 309 309 309 309 309 309 309 309 309	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229 286 309 368 379	229 379 270 325 396 329 286 374 253 376 260 346 313 331	38 29 40 41 31 38 27 40 32 39 24 29 29 31 37
MERCURY METZ MGA MICROMAXX MICROMAXX MICROMAXX MINOTO MINERVA MINOTO MINISTRA MINUTZ MITSUBIGEBEBB MONACO MORGAN'S MOTION MOTION MOTION MULTIFEC MULTITEC MULT MULTITEC MULT MULTITEC MULTITEC MULTITEC MULTITEC MULT MULT MULT MULT MULT MULT MULT MULT	208 224 208 286 205 266 208 286 208 286 208 286 208 286 201 208 286 201 207 208 237 258 207 208 239 252 253 396 412 208 286 201 208 286 201 209 215 266 287 410 209 286 376 396 214 230 228 208 286 376 396 214 230 228 288 288 288 288 288 288 288	286 346 347 348 348 348 348 348 348 348 348 348 348	237 227 233 287 384 252 405 400 262 374	NETSAT NEWTUKEN NEWTECH NIKKO NIKKO NIKKO NIKKO NOBLEX NOBELEX	208 208 208 206 252 252 325 289 281 305 373 3386 253 208 219 307 208 219 307	224 22 224 22 224 22 226 22 237 22 242 26 253 25 253 25 253 25 254 26 255 26 256 26 257 26 25	33 286 8 22-44 270 90 22: 90 22: 91 300 91 3	5 4 422 2 286 7 229 5 3 304 3 353 3 385 7 410 0 3 311 0 2 286	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAMISION PATHE CINEMA PAUSA PCEPPEC PENNY PERIDIO PERIERT PHASE PHILEO PHILEX PHILEASWONIC	274 298 310 405 208 379 208 401 208 214 222 286 214 224 242 242 242 242 242 242 260 208 208 208 208 214 214 225 260 208 208 208 208 208 208 208 208 208 20	285 303 311 409 286 253 374 224 210 216 239 286 307 286 203 211 228 286 202 229 286 397	286 307 362 286 397 270 435 211 220 242 260 309 312 374 298 205 215 229 274 204 236 323 410 202 213	287 308 380 309 405 286 270 212 230 244 405 262 216 235 286 205 267 362 203 227	292 339 384 3112 4410 3331 286 213 226 226 4410 410 209 410 209 410 208 208 208 208 208 208 204 204 204 204 204 204 204 204 204 204	POLYNON POPPY PORTLAND PRANCONINICE PROSTRIAND PRECESION PRECESION PRECESION PRECESION PRECESION PROCES PROJE PROJE PROJEC PROTEC PROTEC PROTEC PROTEC PROTEC PROTON PRO-VISION PULSAR PYE PYMI [C] QUASAR	410 270 224 209 307 253 224 224 224 224 208 205 208 286 410 222 208 227 228 227 228 229 208 211 222 208 211 222 208 208 208 211 222 208 208 208 208 208 208 208 208 208	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229 286 309 368 379	229 379 270 325 396 329 286 374 253 376 260 346 313 331	38 29 40 41 31 38 27 40 32 39 24 29 29 31 37
MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINERVA MINOTA M	208 226 26 26 26 26 26 26 26 26 26 26 26 26	286 346 347 348 348 348 348 348 348 348 348 348 348	237 227 233 287 384 252 405 400 262 374	NETSAT NEWFUKK NEWTECH NIKKO NIKKO NIKKO NISATO NOBLIKO NOBLIKO NOBLIKO NOBLIKO NOBROIK NOBPOIK NOBROIK NORMEREI NOVATRONIC NTC NURNBERG [O] OCEANIC ODEON OKANO OMEGA OWWA OPERA OPTIMUS ORBIT	208 208 252 325 269 270 208 270 208 223 209 208 223 209 208 209 208 209 209 209 209 209 209 209 209 209 209	2224 22 2224 22 2224 22 22253 25 22253 25 22210 21 2242 26 2242 26 2270 22 2270 22 2270 22 2270 22 2270 22 2286 36 36 36 36 37 38 38 31 31 32 32 32 32 32 32 32 32 32 32	33 286 8 22-44 270 90 22: 90 22: 91 300 91 3	5 4 422 2 286 7 229 5 3 304 3 353 3 385 7 410 0 3 311 0 2 286	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAMISION PATHE CINEMA PAUSA PCEPPEC PENNY PERIDIO PERIERT PHASE PHILEO PHILEX PHILEASWONIC	274 298 310 405 208 379 208 401 208 214 224 241 201 2120 208 208 208 209 200 200 200 200 200 200 200 200 200	285 303 311 409 286 253 374 434 224 210 216 239 258 307 286 203 211 225 286 203 211 226 229 286 397	286 307 362 286 397 270 435 221 220 309 312 242 2260 3374 298 295 215 229 274 204 229 274 204 229 274 204 213 229 249 249 249 249 249 249 249 249 249	287 308 380 309 405 286 270 212 230 244 278 384 405 206 216 235 286 205 362 203 227 362	292 384 3312 4410 331 286 226 227 244 4410 209 221 4410 209 221 4410 208 837 4410 208 837 4410 208 837 4410 208 837 4410 208 8410 8410 8410 8410 8410 8410 8410 84	POLYNON POPPY PORTLAND PRANDOMINICE PROTECTION PREMER PRECISION PREMER PRISM PROFEX PROFI PROFIT PROFI PROFIT PROTECH	410 270 224 209 307 253 224 211 224 228 208 208 208 208 226 208 227 208 227 208 227 208 227 208 227 208 227 208 227 208 227 208 227 208 208 208 208 208 208 208 208 208 208	219 309 242 307 307 286 218 210 286 329 229 286 229 286 214 224 224 233 363 363 379 405	229 379 270 325 396 329 286 374 253 376 260 346 313 331 224 225 287 310 370 370 370 412	38 29 40 41 31 38 27 40 32 39 24 29 29 31 37
MERCURY METZ MGA MICROMAXX MICROMAXX MICROMAXX MINITO MINI	208 226 260 286 286 287 287 287 287 287 287 287 287 287 287	286 246 260 246 264 264 264 264 264 264 264 264 264	237 227 233 287 384 252 405 400 262 374	NETSAT NEWFUKK NEWTECH NIKKO NIKKO NIKKO NISATO NOBLIKO NOBLIKO NOBLIKO NOBLIKO NOBROIK NOBPOIK NOBROIK NORMEREI NOVATRONIC NTC NURNBERG [O] OCEANIC ODEON OKANO OMEGA OWWA OPERA OPTIMUS ORBIT	208 208 208 206 252 252 325 289 281 305 373 3386 253 208 219 307 208 219 307	2224 22 2224 22 223 22 2253 22 239 24 210 21 242 26 250 25 250	33 286 8 22-44 270 90 22: 90 22: 91 300 91 3	5 4 422 2 286 7 229 5 3 304 3 353 3 385 7 410 0 3 311 0 2 286	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAVISION PATHE CINEMA PAUSA PCE/PEC PENINY PERECT PHASE PHILEO PHILEX PHILEX PHILEN PHILIPS	274 298 310 405 208 379 208 401 208 208 214 237 255 266 208 205 206 200 213 328 306 410 208 206 200 213 328 326 410 208 208 206 200 213 328 326 410 208 208 208 208 208 208 208 208 208 20	285 303 311 409 286 253 374 24 224 210 216 239 258 307 218 228 218 228 218 228 201 228 218 228 201 228 201 228 201 201 203 201 208 201 208 201 208 201 208 201 208 201 208 201 208 201 208 201 208 201 209 286 397	286 307 362 286 397 270 270 253 211 220 242 2242 2242 236 337 337 298 205 215 229 274 204 236 323 410 202 213 287 402 203 204 204 204 204 204 204 204 204 204 204	287 308 380 309 405 286 270 212 230 442 278 384 405 206 216 235 286 205 267 362 203 227 313 397 429	292 339 384 311 286 410 331 286 410 209 410 209 221 242 440 208 268 374 204 228 235 441 441	POLYNON POPPY PORTLAND PAROMONIPACE PRECISION PREMIER PRECISION PREMIER PRISM PROFEX PROFI PROFI PROFI PROFI PROFI PROSONIC PROTICO PR	410 270 224 209 307 253 224 218 211 224 208 208 209 208 309 222 208 227 208 227 208 227 208 227 208 227 208 227 208 227 208 227 208 227 208 227 208 227 208 227 208 209 209 209 209 209 209 209 209 209 209	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229 286 229 286 229 286 29 20 20 20 20 20 20 20 20 20 20 20 20 20	229 379 270 325 396 329 286 374 253 376 260 346 313 331 224 225 287 310 370 370 370 370 370 370 370 370 370 37	38 29 40 41 31 38 27 40 32 39 24 29 29 31 37
MERCURY METZ MGA MICROMAXX MICROMAXX MIDLAND MINATO MINERVA MINOTA MINOTA MINUTA MITSUBIGNERAL MIVAR MONACO MORGANS MOTION MUTITEC MULITIEC MULITIE	208 226 260 286 286 287 287 287 287 287 287 287 287 287 287	286 246 260 246 264 264 264 264 264 264 264 264 264	237 227 233 287 384 252 405 400 262 374	NETSAT NEWFUNK NEWTYECH NIKKO NEWTYECH NIKKO NIKKO NIKKO NOBLIKO NOBLI	208 208 206 252 255 239 281 329 261 305 373 386 252 325 262 263 263 270 262 268 270 262 268 270 262 268 270 26	2224 22 2224 22 223 22 2253 22 239 24 210 21 242 26 250 25 250	33 2868 224 270 221 388 324 324 325 401 325 401 41 270 41 41 41 41 41 41 41 41 41 41 41 41 41	5 4 422 2 286 7 229 5 3 304 3 353 3 385 7 410 0 3 311 0 2 286	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAMISION PATHE CINEMA PAUSA PCEPPEC PENNY PERIDIO PERIERT PHASE PHILEO PHILEX PHILEASWONIC	274 310 405 208 379 208 323 208 401 208 214 237 255 266 208 214 222 260 202 203 204 204 205 206 208 208 208 214 214 225 266 208 208 208 208 208 208 208 208 208 208	285 303 311 409 286 253 374 253 434 210 216 239 258 308 296 201 228 218 228 229 229 229 229 229 229 229 229 22	286 307 362 286 397 270 270 253 211 220 242 2242 2242 236 337 337 298 205 215 229 274 204 236 323 410 202 213 287 402 203 204 204 204 204 204 204 204 204 204 204	287 308 380 309 405 286 270 212 230 442 278 384 405 206 216 235 286 205 267 362 203 227 313 397 429	292 339 384 311 286 410 331 286 410 209 410 209 221 242 440 208 268 374 204 228 235 441 441	POLYNON POPPY PORTLAND PRANCONINFACE PRECISION PRECESION PRECESION PRECESION PRECESION PRECESION PRECESION PROFE PROFE PROFE PROFE PROFE PROFE PROTECH	410 270 224 209 307 253 224 224 218 211 224 208 208 309 208 240 212 208 208 208 213 224 205 208 208 210 208 210 208 210 208 210 208 208 208 208 208 208 208 208 208 20	219 309 242 307 307 286 218 210 286 329 224 323 229 286 229 286 229 286 229 286 229 286 29 20 20 20 20 20 20 20 20 20 20 20 20 20	229 379 270 325 396 329 286 374 253 376 260 3413 331 224 225 287 310 370 370 412	38 29 40 41 31 38 27 40 32 39 24 29 29 31 37 39
MERCURY METZ MGA MICROMAXX MICROMAXX MINITO	208 226 265 267 268 268 268 268 268 268 268 268 268 268	286	227 227 233 287 384 252 405 400 262 374	NETSAT NEWFUKK NEWTECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO NORKIC NORDMENDE NORPOLK NORDMENDE NORPOLK NORMEREL NOSHIND NOWATROLK NOVATROLK OPENA OPENA OPTINUS ORANO OMEGA ONWA OPTINUS ORANO OMEGA ONWA OPTINUS ORANO ORION ORIONO ORION	208 208 209 209 209 209 209 209 209 209 209 209	2224 2: 2224 2: 2224 2: 223 2: 233 29 242 2: 242 2: 253 2: 253 2: 253 2: 253 2: 253 2: 254 2: 264 2: 264 2: 265 2: 266 3: 276 2:	33 2868 224 4 270 309 331 4 251 6 300 331 4 251 6 300 3 3 3 3 6 6 300 3 3 3 6 6 300 3 3 6 6 300 3 3 6 6 300 3 3 6 6 300 3 3 6 6 300 3 3 6 6 300 3 3 6 6 300 3 3 6 6 3 6 3	5 4 422 2 286 7 229 6 8 3 304 9 353 3 385 7 410 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAMISION PATHE CINEMA PAUSA PCE/PEC PERDIO PERFEKT PHASE PHILCO PHILEX PRIJANGMONIC PHILIPS PHOENIX PHONOLA	274 298 310 405 208 329 208 323 208 401 405 208 208 208 208 208 208 208 208 208 208	285 303 311 409 286 253 374 253 374 253 224 210 229 228 307 286 308 211 228 228 218 228 229 229 229 229 229 229 229 229 22	286 307 362 286 397 270 435 253 211 220 2242 309 312 374 298 205 215 229 274 204 236 337 410 202 213 224 225 236 247 247 247 247 247 247 247 247 247 247	287 308 380 309 405 286 270 212 212 2230 2244 405 206 216 235 286 205 267 362 203 327 313 397	292 293 384 311 2 410 331 312 246 245 245 245 247 2410 209 221 242 2410 208 268 374 410 209 201 201 201 201 201 201 201 201 201 201	POLYNON POPPY PORTLAND PAROMONIPACE PRECISION PREMIER PRECISION PREMIER PRISM PROFEX PROFI PROFI PROFI PROFI PROFI PROSONIC PROTICO PR	410 270 224 209 307 253 224 224 224 208 205 208 309 208 226 410 222 208 226 410 222 208 227 208 229 410 209 209 209 209 209 209 209 209 209 20	219 309 242 307 307 286 218 229 224 323 229 286 309 224 323 229 286 286 206 286 286 296 405	229 379 270 325 396 329 286 374 253 376 260 346 343 331 331 224 225 287 310 370 370 370 370 410 410 410 410 410 423 423	38 40 41 31 38 27 40 32 39 31 37 37 39
MERCURY METZ MGA MICROMAXX MICROMAXX MINUTA MINUTA MINUTA MINUTA MITSUBIGNERAL MIVAR MOTOROLA MOTOROLA MULTITECH MURPHY MUSIKLAND MURPHY	208 226 26 26 26 26 26 26 26 26 26 26 26 26	286 346 397 229 233 346 397 240 210 211 395 396 331 407 226 286 286 370 374 413 374 374 374 374 374 374 374 374 374 37	227 227 227 233 287 384 252 405 400 262 374	NETSAT NEWFUNK NEWTYECH NIKKO NEWTYECH NIKKO NIKKO NIKKO NOBLIKO NOBLI	208 208 206 252 255 239 281 329 261 305 373 386 252 325 263 279 261 262 268 279 307 262 208 270 262 208 270 262 208 270 310 208 270 262 208 270 310 208 270 262 288 270 262 288 270 262 288 270 262 288 270 262 288 270 268 270 310 268 270 268 270 310 268 270 268 270 310 268 270 268 270 310 268 27	2224 2: 2224 2: 2224 2: 2224 2: 2224 2: 2233 2: 2239 2: 2242 2: 2244 2	33 2868 2244 270 410 410 410 410 410 410 410 410 410 41	5 4 422 2 286 7 229 5 3 304 3 353 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAMISION PATHE CINEMA PAUSA PCE/PEC PENNY PERDIO PEREKT PHASE PHILCO PHILEX PHILEX PHILEX PHILES PHOENIX	2794 310 405 208 379 208 323 208 323 208 401 208 214 225 266 208 224 242 242 242 240 222 260 208 208 208 208 208 208 208 208 208 20	285 303 311 409 286 253 374 253 434 210 216 239 258 308 296 201 228 218 228 229 229 229 229 229 229 229 229 22	286 307 362 286 397 270 435 253 211 220 2242 309 312 374 298 205 215 229 274 204 236 337 410 202 213 224 225 236 247 247 247 247 247 247 247 247 247 247	287 308 380 309 405 286 270 212 212 2230 2244 405 206 216 235 286 205 267 362 203 327 313 397	292 293 384 311 2 410 331 312 246 245 245 245 247 2410 209 221 242 2410 208 268 374 410 209 201 201 201 201 201 201 201 201 201 201	POLYNON POPPY PORTLAND PAROMONIFICE PRECISION PREMER PRECISION PREMER PRISM PROFE PROFI PROFITCH PROFICE PROTECH PROTIC P	4100 270 224 209 208 225 307 361 378 400 209 208 208 224 400 200 200 200 200 200 200 200 200	219 309 242 307 307 286 218 210 228 329 224 323 229 286 309 368 368 379 405	229 379 270 325 396 374 253 376 260 346 313 331 224 225 287 310 370 395 412	38 40 41 31 38 27 40 32 39 31 37 37 39
MERCURY METZ MGA MICROMAXX MICROMAXX MIDLAND MINATO MINERVA MINOTA MINISTA MITSUBIGNERAL MITSUBIGNER	208 226 26 26 26 26 26 26 26 26 26 26 26 26	286	227 227 227 233 287 384 252 405 400 262 374	NETSAT NEWFUKK NEWTECH NIKKAI NIKKO NISATO NOBLEX NOBLIKO NORKIC NORDMENDE NORPOLK NORDMENDE NORPOLK NORMEREL NOSHIND NOWATROLK NOVATROLK OPENA OPENA OPTINUS ORANO OMEGA ONWA OPTINUS ORANO OMEGA ONWA OPTINUS ORANO ORION ORIONO ORION	208 208 208 206 252 255 259 281 329 261 305 253 208 261 253 268 253 208 270 208 270 262 208 230 208 230 208 220 208 220 208 270 262 208 208 208 208 208 208 208 208 208 20	2224 2: 2224 2: 2224 2: 223 2: 233 29 242 2: 242 2: 253 2: 253 2: 253 2: 253 2: 253 2: 254 2: 264 2: 264 2: 265 2: 266 3: 276 2:	33 2868 2244 270 301 22 383 21 410 410 410 410 410 410 410 410 410 41	5 4 422 2 286 7 229 5 3 304 3 353 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAMISION PATHE CINEMA PAUSA PCE/PEC PERDIO PERFEKT PHASE PHILCO PHILEX PRIJANGMONIC PHILIPS PHOENIX PHONOLA	2794 310 405 208 379 208 323 208 401 208 214 225 286 252 226 224 241 210 202 226 260 203 213 326 208 208 208 208 208 208 208 208 208 208	285 303 311 409 286 253 374 224 210 229 286 307 286 308 296 203 211 228 218 228 219 229 229 229 229 229 220 221 221 221 221 221 222 223 224 224 225 225 226 227 227 227 227 227 227 227 227 227	286 3362 286 337 270 435 253 211 220 260 3309 242 2260 337 374 298 205 227 227 227 227 227 227 227 227 227 22	287 308 380 309 405 2286 270 212 230 2244 2278 384 405 206 216 235 2267 362 203 227 362 233 243 244 278 378 378 378 378 378 378 378 378 378 3	292 384 339 384 3312 4410 410 209 221 224 2410 208 288 3374 410 208 208 3374 228 3375 3376 2286 2287 2286 287	POLYNON POPPY PORTLAND PRANCONINFACE PRECISION PRECESION PRECESION PRECESION PRECESION PRECESION PRECESION PROFE PROFE PROFE PROFE PROFE PROFE PROTECH	4100 270 224 209 208 225 307 361 378 400 209 208 208 224 400 200 200 200 200 200 200 200 200	219 309 242 307 307 286 218 210 286 329 286 229 286 229 286 229 405	229 379 270 325 396 374 253 376 260 346 313 331 224 225 287 310 370 395 412 410 410 208 239 296	38 40 41 31 38 27 40 32 39 24 25 29 31 37 39 20 24
MEMPHIS MERCURY METZ MGA MICROMAXX MIDLAND MINATO MINATO MINATO MINIATO MINIAT	208 226 208 286 209 208 286 209 208 286 209 208 286 209 208 286 209 208 286 209 209 209 209 209 209 209 209 209 209	286 346 397 374 413 216 225 235 286 286 286 286 286 286 286 286 286 286	227 227 233 287 384 252 405 400 262 374 307	NETSAT NEWFUKK NEWTECH NIKKO NIKKO NIKKO NIKKO NOBLIKO NOBLIKO NOBLIKO NOBLIKO NOBROIK NOBPOIK NOBPOIK NOBROIK NOBROIK NOBROIK NOBROIK ONORMEEL OREONO OCEANIC ODEON OMANO OPENA OPE	208 208 252 255 261 261 262 262 262 263 263 263 263 263 263 263	2224 2: 2224 2: 2224 2: 2224 2: 2224 2: 223 2: 223 2: 2242 2: 2253 2: 2262 2:	33 2868 224 277 4110 15 246 11 257 331 16 299 331 16 299 331 17 300 17 3	5 4 422 2 286 7 229 5 5 3 3 304 3 3 304 3 3 305 7 410 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	[P] PACIFIC PAEL PALLADIUM PALSONIC PANAMA PANASONIC PANAMISION PATHE CINEMA PAUSS PUEPEC PENNY PERDIO PERTEKT PHASE PHILCO PHILEX P	2794 3100 405 208 329 208 323 323 208 401 208 214 227 225 286 208 222 226 208 222 226 208 213 224 241 242 201 212 226 208 208 214 242 201 212 208 208 208 208 208 208 208 208 208 20	285 303 311 409 286 253 374 253 212 216 239 307 212 228 307 218 228 203 211 228 229 229 229 229 229 229 229 229 229	286 3362 286 337 270 435 211 220 242 2260 3374 298 205 215 229 274 204 236 323 410 202 213 228 249 249 249 249 249 249 249 249 249 249	287 308 380 309 405 2286 270 212 230 2244 2278 384 405 206 216 235 2267 362 203 227 362 233 243 244 278 378 378 378 378 378 378 378 378 378 3	292 293 384 311 2 311 2 311 2 311 2 311 311 311 311	POLYNON POPPY PORTLAND PRANCOMPRICE PRECISION PREMER PRECISION PREMER PRESCH PROSCAN POLICA PROTECH PR	4100 270 224 208 205 208 224 224 224 224 224 224 227 208 205 208 227 208 222 208 222 208 208 205 208 208 205 208 208 205 208 208 205 206 208 208 208 205 206 208 208 208 208 208 208 208 208 208 208	219 309 242 307 307 286 218 210 286 329 286 224 323 229 286 229 405 286 266 279 405	229 379 270 325 396 329 286 374 253 376 260 346 313 331 224 245 287 310 395 412 410 410 208 239 412 410 208 239 412 410 208 224 410 410 410 410 410 410 410 410 410 41	38 29 40 41 31 38 27 40 32 39 24 25 29 31 37 39 20 24 39 28





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DVB-S/S2 Tuner And Channel

RF Input Range	950MHz ~ 2150MHz			
Input Connector	F-Type Female (With Loop-Through Output)			
Input Impedance	75[0hm]			
Input Dynamic Range	-65dBm ~ -25dBm			
Multi Demodulation Standard	DVB-S, DVB-S2 : QPSK, 8PSK			
Symbol Rate	DVB-S: QPSK Maximum 45Msps @ 2~45Msps			
	DVB-S2:8PSK/QPSK Maximum 30Msps @ 10~30Msps			
Multi Decoding Method Standard	LDPC/BCH DVB-S2(1/2, 2/3, 3/4, 3/5, 4/5, 5/6, 8/9, 9/10)			

DVB-S/S2 MPEG TS A/V Decoding

Transport Stream Format	MPEG-4 Part10 AVC/H.264 HD HP@L4.1 1920x1080@50Hz(ISO/IEC 13818
	MPEG-2 TS Specifications)
Profile Level	MPEG-2 MP@HL, MPEG-4 Part10 AVC/H.264 HD HP@L4.1
Input Rate	Maximum 90Mb/s
Video Aspect Ratio	4:3, Letter Box, 16:9, Pan & Scan
Video Display Resolution	1920x1080i, 1280x720p, 720x576i/p, 720x480i/p @ 50/60Hz
Audio Decoding Format	Dolby Digital bit-streams, MPEG-1 Layer 1,2,3
Audio Output Mode	Mono, Left, Right, Stereo, Dolby Digital bit-streams(PCM 5.1 Channel,
	Stereo down-mixed Dolby ProLogic)

DVB-T Tuner And Channel

RF Input Range	VHF-High Band 149.5MHz ~ 426MHz,
	VHF-Low Band 50.5MHz ~ 142.5MHz, UHF-Band 434MHz ~ 858MHz
Input/ Loop-Through Output Connector	1 x Din Jack for DVB–T, 1x Din Jack for DVB–T Loop–Through Output
	(IEC 169-2 Female/Male)
Input Impedance	75[Ohms] Nominal
Input Signal Level	-80dBm ~ -5dBm(64QAM, Code Rate 2/3, Guard Interval 1/32,
	Gaussian Channel)
Digital Modulation Scheme	QPSK, 16-QAM, 64-QAM(Constellation)
Guard Interval	1/4, 1/8, 1/16 and 1/32
Modulation Mode	2K, 4k, 8K modes
Supporting System	DVB-T(COFDM) Compliant (Frequency Band Modulation) ETSI 300 744
IF BandWidth	6/7/8MHz channel
FEC Code Rates	1/2, 2/3, 3/4, 5/6, 7/8







6.3 Specification

DVB-T MPEG TS A/V Decoding

Transport Stream Format	MPEG-4 Part 10 AVC/H.264 HD HP@L4.1 1920x1080@50/60Hz(MPEG-2
	ISO/IEC 13818 Transport Stream Specification)
Profile Level	MPEG-2 MP@HL, MPEG-4 Part10 AVC/H.264 HD HP@L4.1
Input Rate	Maximum 31.668450Mb/s, 27.709893Mb/s
Video Aspect Ratio	4:3, Letter Box, 16:9, Pan & Scan
Video Display Resolution	1920x1080i, 1280x720p, 720x576i/p, 720x480i/p @ 50/60Hz
Audio Decoding Format	Dolby Digital bit-streams, MPEG-1 Layer 1,2,3
Audio Output Mode Mono, Left, Right, Stereo, Dolby Digital bit-streams(PCM 5.1	
	Stereo down-mixed Dolby ProLogic)

A/V And Data Output

1 Set(3xRCA Vertical Array Type)
1 Set(3xRCA Vertical Array Type)
1 Optical(Fiber Optic Type)
1 Connector
TV/VCR
2 USB A-Type Connector
1 Connector RJ-45 10/100 Base-T
Transfer Rate 115,200bps(Firmware Upgrade Port)

Conditional Access Interface

PCMCIA	2 Slots For DVB Common Interface Standard
Smart Card	2 Smart Card Support

Storage Device

SATA (Serial ATA)	1 External eSATA Port
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System Resource Information

Main Processor	300MHz MIPS32TM/16-e class CPU
Flash ROM	Default 32Mbytes
DDR SDRAM	Default 256Mbytes

Power Supply

Input Voltage Power Consumption	AC 100-240V ~ 50/60Hz Maximum 35Watts
Protection	Separate Internal Fuse
Туре	SMPS(Switching Mode Power Supply)
Safety And EMI	For Country Regulation

Physical Specification

,5				
Dimension(WxDxH)	340x268x60[mm]			
Net Weight	About 3.0Kg			
Operation Temperature	5°C ~ 50°C			
Storage Temperature	-40°C ~ 65°C			





6.2 Tālvadības kontroles TV iestatījumi

Zīmolu saraksts TV

RADIX	298	SAMSUNG 205 206 208 209 215	SIAREM 329 362 384 397 410	STENWAY 274
RANK	395	216 218 224 229 253 260 270 277 286 287	SICATEL 320	STERN 244 270 275 309 312
RANK ARENA	207 395 416 417 418 419	296 325 337 374 410	SIEMENS 208 250 251 269 286	410
RBM	395	412	307	STRATO 208 224 270 286
RCA	210 211 228 229 230	SAMSUX 209	SIERA 208 286	STYLANDIA 253
	235	SANDRA 252 253	SIESTA 374	SUNIC LINE 208 286
REALISTIC	205 206 209 215 229	SANSEI 282	SIGNATURE 226 242	SUNKAI 208 286 310 311 389
	239 245 260 262 296	SANSUI 208 283 286 389 402	SILVA 208 286 307	SUNSTAR 208 224 270 286
RECOR	208 286	SANTON 224	SILVER 207 208 261 286 307	SUNWOOD 208 224 286
RECTILIGNE	208 286	SANYO 207 208 218 223 224 225 239 243 253 264	388 389 410	SUPERLA 253 384
REDIFFUSION	307 373	286 296 297 298 325	SIMPSON 267 268	SUPERTECH 208 224 286 307
REDSTAR	208 286	326 361 374 376 398	SINGER 208 224 286 329 362 397 410	SUPRA 215 224
REFLEX	208 286 346 400	404 409 410 413 420 424 425 426 432	SINUDYNE 208 241 286 307 329	SUSUMU 254
REKORD	359	SAVE 208 286	362 384 397 405 410	SUTRON 224
REOC	387	SBR 208 286	SKANTIC 309 406	
REVOX	208 286 374	SCHAUBLORENZ 307 309 376 385 387	SKY 208 286	SYDNEY 253
REX	244 270 275 309 312	405	SKYMASTER 399	SYLVANIA 200 202 204 205 213 267 268 288
	410	SCHNEIDER 208 253 254 270 286 307 336 346 353 357	SLX 400	
RFT	218 270 286 328 374 380 397 413	362 387 400 405 410	SOGERA 308	
RHAPSODY	252 265 266	SCIMITSU 229	SOLAVOX 206 208 218 244 286	SYSLINE 208 286
RICOH	208 286	SCOTCH 260	307 410	[T]
ROADSTAR	208 224 254 270 274	SCOTLAND 410	SONIKO 208 286	TADNDY 325
HOADSTAIN	286 323 346	SCOTT 229 257 260 261 262	SONITRON 253 296 298 374 404	TANDBERG 307 312 408 410
ROBOTRON	397	SEARS 210 213 215 229 239 242 243 249 260 261	SONNECLAIR 208 286	TANDY 218 230 244 253 254
RODEX	208 286	296	SONOKO 208 224 253 270 274 286	410
ROWA	253 270 401 403	SEG 207 208 224 253 270	SONOLOR 244 274 296 307 410	TASHIKO 207 253 313 407 410 TATUNG 208 214 218 222 253
ROYAL LUX	331 374	286 328 329 346 396 400 405 408 410	SONTEC 208 224 286 374	TATUNG 208 214 218 222 253 286 325 384
RTF	208	SEI 208 241 286 329 384	SONY 206 207 208 225 230	TCM 387
RUKOPIR	208 286	397 405 410	264 272 285 286 329	TEAC 208 224 229 253 270
RUNCO	205 227	SEI-SINUDYNE 208 286 307 309 310	424 426 430	274 286 287 307 323
[S]		311 329 384 397	SOUND & VISION 208 286 329 SOUND FSIGN 229 260 261 262 267	331 346 362 389 400 401 402 403 405
SABA	244 305 307 309 397	SELECO 244 270 275 290 309	SOUNDESIGN 229 260 261 262 267 SOUNDWAVE 208 286 323	401 402 403 405 TEC 208 224 253 286 307
	384 410	312 321 322 373 408 410	SOUNDWAVE 208 286 323 SPECTRA 224 333	333 410
SAGEM	274 339 389	SEMIVOX 262	SPECTRA 224 333 SPECTRICON 222	TECHLINE 208 286 329 400
SAISHO	224 225 241 253 270 310 384 410	SEMP 242	SQUAREVIEW 249	TECHNEMA 308
SAIVOD	208 286 410	SENCORA 224	SR2000 296	TECHNICS 210 211 227 279
SAKIO	270	SENTRA 224 242 394 405	SSANGYONG 224	TECHNISAT 208 286 330 410
SALORA	244 292 296 304 307	SERINO 389	SSS 229 262	TECHNOLACE 261
	309 325 364 365 366	SHARP 207 209 230 245 384	STAKSONIC 224	TECHWOOD 211 215 222
	367 368 369 377 384 391 392 404 405 406	SHINTOSHI 208 286	STANDARD 208 224 253 254 286	TECHNIMAGEN 208
	407 409 410 411 412	SHIVAKI 208 286	308 346	TEDELEX 208 224 253 286 296
SAMBERS	329 379 384 396	SHOGUN 229	STARLITE 208 224 262 270 286	385
SAMPO	205 206 209	SHORAI 261 311	331 410	TEIRON 224
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TEKNIKA	209 21				TRIAD	208	286			
	226 22	9 237	261	262	TRIDENT	253	384			
TELECO	267 335				TRISTAR	270				
TELECO	208 25	2 206	410		TRIUMPH		241	259	286	373
TELECOR	208 25					384				
TELEGAZI	208 27				TSOSCHI	274				
TELEGAZI	208 28		410		TVTEXT	287				
TELESONIC	208 28				TV TEXT 95	208				
TELESTAR	208 28									
TELETECH	208 22		400		[U]					
TELETON	207 25			405	UHER		286 376		323	329
12221011	410	20,	505	100				396		
TELEVIDEON	308 41	0			ULTRA		325			
TELEVIEW	208 28	6			ULTRAVOX	208 410	286	329	362	397
TELEXA	329				UNIC LINE		206	201	389	405
TEMPEST	208 22	4 286			UNITED			387		403
TENNESSEE	208 28	6			UNIVERSAL		203	30/	200	
TENSAI	208 22							252	270	200
	303 30		388	398	UNIVERSUM		307		323	
TENSON	224	U					381		383	
TESLA	335								399	400
TEVION	208 28	6 400						410		
TEXET	224 25		254		UNIVOX		286	397	410	
THOMAS	313 32		201		UTAX	410				
THOMSON	208 25	- 8 286	345	405	[17]					
THORN	208 21									
	287 29				VECTOR RESEARCH	205				
	315 32	6 327	394	398	VESTEL	410	253	286	346	400
THORN-FERGUSON	407 307 39	4 200			VEXA		224	286		
	215 22				VICTOR	212	224	200		
TMK	208 22			225	VIDEOSYSTEM		286			
IOKAI	400 41		280	323	VIDEOLOGIOUE	253	200			
токуо	394				VIDEOTECHNIC	253				
TOMASHI	274				VIDEOTON		406	410		
TOSHIBA	207 21	6 239	242	253	VIDEOTON		329	410		
	259 29		329	370	VIDIKRON		229	200		
	394 39	5							225	
TOSONIC	266				VISA	258	208	224	225	244
TOTEVISION	209				VISION		253	286	308	
TOWADA	253 30	9 329	405		VISTAR	307		_00	_ 00	
TOYODA	224				VORTEC		286			
	210				VOXSON			286	309	323
TRAKTON TRANS CONTINENS	208 25									
TRAKTON TRANS CONTINENS TRANSONIC	208 25			389			397			

WALTHAM	208			304	30
		400			
WARDS	200		203		
	213 242	215 245	226	229 261	
WATSON	208			308	
WATT RADIO	307	329	362	405	4
WEGA	207	208	286	397	
WEGAVOX	208	224	286		
WELTBLICK	208	253	286		
WESTON	208	286			
WHARFEDALE	208	286			
WHITE WESTINGHOUSE	208	252	286	296	30
WINDSOR	400				
WINDSTAR	274				
WINDY SAM	208				
WINTEL	387				
WORLD-TECH	333				
[X]					
XRYPTON	208	286			
[Y]					
YAMAHA	205	229			
YAMISHI	208		274	286	31
YOKAN	208	286			
YOKO	208				28
	333	374	404	409	
YORK	298				
[Z]					
ZANUSSI	253				
ZENITH	219	226	227		
ZENOR	404				
ZONDA	222				







DVB-S/S2 uztvērējs un kanāli

RF ievades diapazons	950MHz ~ 2150MHz	
levades savienotājs	F-tipa sievišķais (ar Loop-Through izvadi)	
levades pretestība	75[0hm]	
levades dinamiskais diapazons	-65dBm ~ -25dBm	
Multi demodulācija Standarta	DVB-S, DVB-S2 : QPSK, 8PSK	
simbolu ātrums	DVB-S: QPSK maks. 45Msps @ 2~45Msps	
	DVB-S2: 8PSK/QPSK maks. 30Msps @ 10~30Msps	
Multi dekodēšanas metodes standarts	LDPC/BCH DVB-S2(1/2, 2/3, 3/4, 3/5, 4/5, 5/6, 8/9, 9/10)	

DVB-S/S2 MPEG TS A/V Dekodēšana

Transporta straumēšanas formāts	MPEG-4 Part10 AVC/H.264 HD HP@L4.1 1920x1080@50Hz(ISO/IEC 13818
	MPEG-2TS specifikācijas)
Profila līmenis	MPEG-2 MP@HL, MPEG-4 Part10 AVC/H.264 HD HP@L4.1
levades ātrums	Maks. 90Mb/s
Video ekrāna formāts	4:3, "Letter Box", 16:9, "Pan & Scan"
Video displeja izšķirtspēja	1920x1080i, 1280x720p, 720x576i/p, 720x480i/p @ 50/60Hz
Audio dekodēšanas formāts	Dolby Digital bit-straumes, MPEG-1 slānis 1,2,3
Audio izvades režīms	Mono, kreisais, labais, Stereo, Dolby Digital bit-straumes(PCM 5.1 kanāls,
	Stereo lejupvērstais-jauktais Dolby ProLogic)

DVB-T Tuner And Channel

RF ievades diapazons	VHF-augsta josla 149.5MHz ~ 426MHz,
	VHF-zema josla 50.5MHz ~ 142.5MHz, UHF-josla 434MHz ~ 858MHz
levade/ Loop-Through Izvades savienotājs	1 x Din ligzda priekš DVB-T, 1x Din ligzda priekš DVB-T Loop-Through
	izvade (IEC 169-2 sievišķais/vīrišķais)
levades pretestība	75[Ohms] Nominālais
levades signāla līmenis	-80dBm ∼ -5dBm(64QAM, Koda ātrums 2/3, Aizsardzības intervāls 1/32,
	"Gaussian" kanāls)
Digitālā modulācijas shēma	QPSK, 16-QAM, 64-QAM("Constellation")
Aizsardzības intervāls	1/4, 1/8, 1/16 un 1/32
Modulācijas režīms	2K, 4k, 8K režīmi
Atbalsta sistēma	DVB-T(COFDM) savietojams (Frekvences joslas modulācija) ETSI 300 744
IF joslas platums	6/7/8MHz kanāls
FEC koda ātrums	1/2, 2/3, 3/4, 5/6, 7/8





6.3 Specifikācijas

DVB-T MPEG TS A/V dekodēšana

Transportēšanas straumes formāts	MPEG-4 Part 10 AVC/H.264 HD HP@L4.1 1920x1080@50/60Hz(MPEG-2 ISO/IEC 13818 transportēšanas straumes specifikācijas)
Profila līmenis	MPEG-2 MP@HL, MPEG-4 Part10 AVC/H.264 HD HP@L4.1
levades ātrums	Maks. 31.668450Mb/s, 27.709893Mb/s
Video ekrāna formāts	4:3, "Letter Box", 16:9, "Pan & Scan"
Video displeja izšķirtspēja	1920x1080i, 1280x720p, 720x576i/p, 720x480i/p @ 50/60Hz
Audio dekodēšanas formāts	Dolby Digital bit-straumes, MPEG-1 slānis 1,2,3
Audio izvades režīms	Mono, kreisais, labais, Stereo, Dolby Digital bit-straumes(PCM 5.1 kanāls,
	Stereo lejupvērstais-jauktais Dolby ProLogic)

A/V un datu izvade

Analogais komponents YPbPr	1 kompl.(3xRCA vertikālās bultas tips)
CVBS(Kompozītu Video), Stereo Audio	1 kompl. (3xRCA vertikālās bultas tips)
S/PDIF Dolby Digital interfeiss	1 optiskais(šķiedru optiskais tips)
HDMI (ar HDCP opciju)	1 savienotājs
SCART interfeiss	TV/VCR
USB2.0 Host interfeiss	2 USB A-tipa savienotājs
Ethernet	1 savienotājs RJ-45 10/100 bāzes-T
RS-232C datu porta D-Sub9 interfeiss	Pārsūtīšanas ātrums 115,200bps (aparatūras atjaunināšanas ports)

Nosacījuma piekļuves interfeiss

PCMCIA	2 sloti DVB kopējam interfeisa standartam
Smart karte	2 Smart kartes atbalsti

Uzglabāšanas ierīce

SATA (Serial ATA)	1 Ārējais eSATA Ports
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Sistēmas resursu informācija

Galvenais Procesors	300MHz MIPS32TM/16-e class CPU
Flash ROM	32Mbaiti
DDR SDRAM	Noklusējuma 256Mbaiti

Strāvas padeve

levades voltāža	AC 100-240V ~ 50/60Hz
Enerģijas patēriņš	maks. 35vati
Aizsardzība	Atsevišķs iekšējas drošinātājs
Tips	SMPS (ieslēgšanas režīma strāvas padeve)
Drošība un EMI	Valsts regulām

Fiziskās specifikācijas

·		
Izmēri(PxDzxA)	340x268x60[mm]	
Neto svars	apm. 3.0Kg	
Operation Temperature	5°C ~ 50°C	
Storage Temperature	-40°C ~ 65°C	



